AMERICAN GAS ASSOCIATION

Monthly

Pg 22, 48

Sent by:

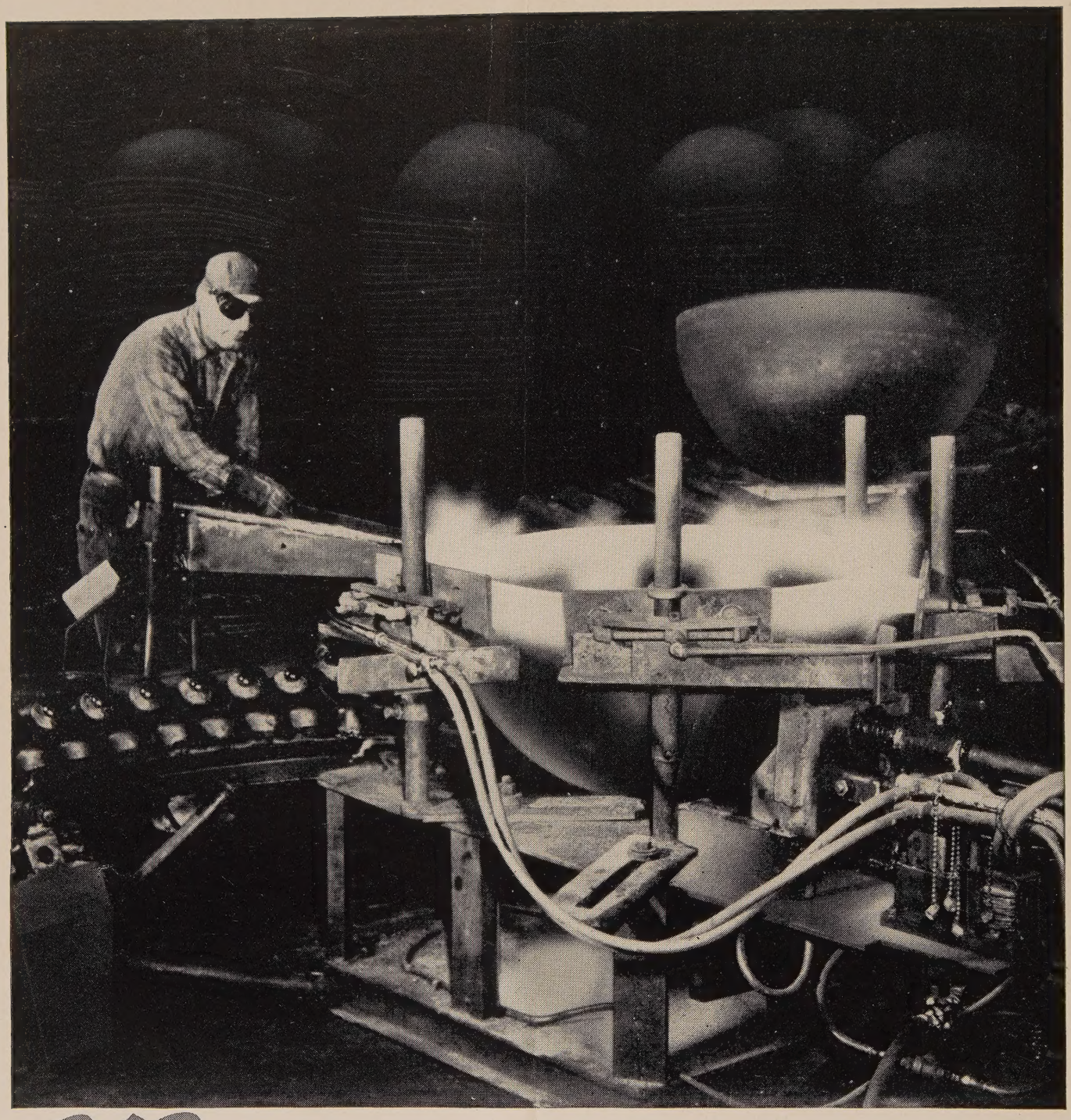
GENERAL ELECTRIC

AIR CONDITIONING DIVISION

5 LAWRENCE STREET

BLOOMFIELD, NEW JERSEY, U.S.A.

JULY-AUGUST
1955



GAS gives new strength to tank heads at Lukens Steel Company

Lukens Steel Company, Coatesville, Pennsylvania, makes a complete line of heads for high pressure LP-Gas storage tanks. For economy reasons, these heads are cold pressed. But cold pressing leaves brittle areas on the head rim. When heads go through the "bumps" and "bangs" of tank assembly, breaks occasionally develop in the brittle area around the head rim.

Lukens solved the problem by stress relieving the heads with Gas. An assembly line conveyor brings the heads to a special Gas-fired machine where a battery of burners stress relieves the entire periphery of the ¼ inch thick head rim. As a result, there are no more brittle areas in the rim. And there are no more breaks during assembly operations.

When you have a problem in your production line involving heat processing, call your Gas Company Industrial Specialist. He'll be glad to discuss the economies and results you can expect from using Gas and modern Gas-fired equipment. *American Gas Association.*

Above is one of a series of advertisements, prepared under supervision of A. G. A. Industrial and Commercial Advertising Committee, appearing in business publications

With the appearance of flight, 30-inch gas line crosses Colorado River near Blythe, Calif. A Mel Jones photograph

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STRAIGHT gas companies whose management may have reservations, tacit or expressed, about the willingness or ability of combination member companies to participate wholeheartedly in the Gas Industry Development Program, are invited to turn to page 8. The case history on what Baltimore Gas and Electric is doing to promote the use of gas in its city gas territory should give many a "simon-pure" gas utility a goal to strive toward. . . . J. Theodore Wolfe, Baltimore's executive vice-president and GID head, presents his own ideas on the "Giddyap" program, especially as it applies to industrial and commercial gas sales. Excerpts from his stimulating talk delivered recently in Boston are carried on page 29. . . . Our hosts of Pacific Coast Gas Association are preparing a festive time for the joint A. G. A.-PCGA Convention next October. An evening at the new Disneyland, including a campfire barbecue, is among the events lined up already. For details, including the more mundane hard work of a convention, see page 7. . . . Another conference, the sixth meeting of the International Gas Union, is also on this fall's agenda. For the first time, the U. S. gas industry is acting as host to its colleagues from abroad. Preliminary arrangements are on page 23.

JAMES M. BEALL
DIRECTOR, PUBLIC INFORMATION

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EDITOR

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NEWS EDITOR

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VOL. 37 NOS. 7 AND 8

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STRAWS in the wind

A report in brief on industry trends and activities

FEDERAL AID FOR MUNICIPAL GAS SYSTEMS

Those persons who may feel that the gas industry's fine record of growth and service under private enterprise has earned it immunity from public power measures are due for a shock. Already passed by the Senate and reported out by the House Banking and Currency Committee is a bill that provides for a $100 million revolving fund to be used for financing ". . . basic public works, including . . . gas distribution systems." On July 1, the House Rules Committee by a 6-6 vote refused to report it out, but may reconsider.

This provision is under Title II of the 1955 Housing Bill, S. 2126. Municipal electric systems are not included. Its administration would be under the Housing and Home Finance Administrator.

This action serves notice that the advocates of public power are still busy in the nation's capital, and that they are not interested solely in electric power. The gas industry must be on the alert.

IKE ON PRODUCERS

Controversy over regulating producers came up at a recent Presidential news conference. Asked for comment, the President posed the problem succinctly: "How do you defend adequately and properly a consuming public. And how do you encourage at the same time the utmost in exploration and exploitation of the natural resources—in this case, gas?" He expressed the opinion that Congress is making progress in devising a bill which will solve this dilemma.

RELOCATION COSTS

Democrats in the House have their own version of provisions for reimbursing utilities for relocation costs under the proposed federal highway aid program. As in the bill passed by the Senate, these costs would be reimbursed up to 50 percent, but the House group has removed the two percent limitation imposed by the Senate.

LOCAL REQUIREMENTS

Progress toward eliminating many special local appliance requirements which are now obsolete or no longer pertinent was achieved at a meeting of representatives of all gas companies which have special requirements supplementary to A. G. A. requirements. Support by top management of these companies will be required if these representatives are to be able to complete their assignment at a subsequent meeting.

SPECTACULAR ACTION

A spectacular 50 percent increase in gas range sales is reported from the Lansing Action Demonstration City area. Gas clothes dryer and gas incinerator sales have jumped by 30 percent. Most encouraging to this merchandising gas company is increased sales by appliance dealers. The company has already set up another demonstration area and plans to extend the plan to other cities in its territory.

NO DOWN PAYMENT

Houston Natural Gas has followed the lead of a number of other companies with an ingenious plan to upgrade gas range sales. The gas company, which handles credit for appliance dealers, has removed down payment requirements for ranges selling at more than $200. Lower priced range sales still require a regular down payment.

TRAVELING FUEL

"The Fuel That Travels 425,000 Miles a Day" is the intriguing title of an article in "Steelways," external organ published by American Iron and Steel Institute. Beginning with a four-color cover photograph, the article follows natural gas from exploration through transmission. Producers' fears of federal regulation were voiced at the article's conclusion.

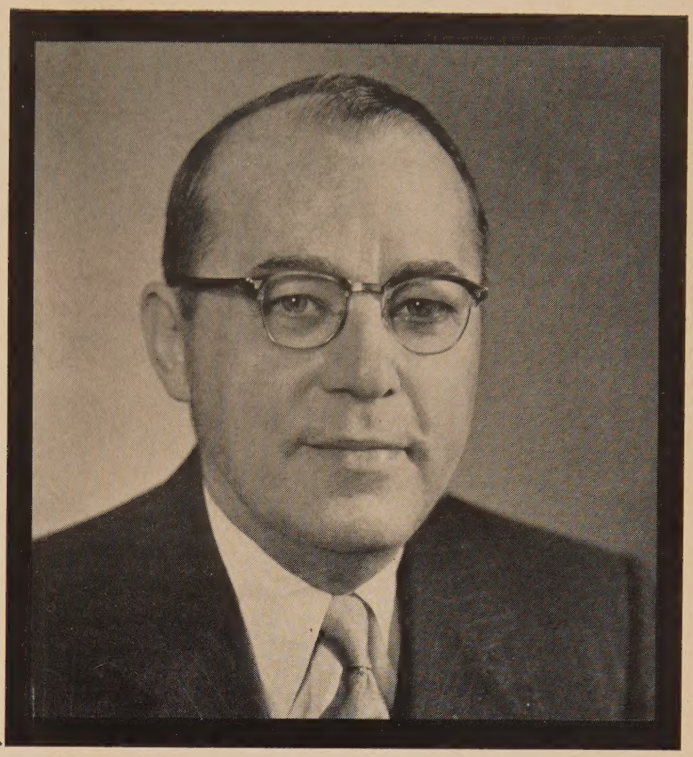
INTRICATE LINKAGE

President Banks spoke eloquently at the Canadian Gas Association convention of a Canada and United States linked by natural gas transmission lines (see page 11). A dramatic instance of such linkage was described by S. Cassell Barrett, Colorado Interstate Gas vice-president, at an American Institute of Mining and Metallurgical Engineers meeting in Denver. Gas from the Rocky Mountains, he said, will be able to reach any U. S. market when Colorado Interstate's new line is connected with Pacific Northwest's line from the San Juan Basin.

KITCHEN STANDARDIZATION

"House & Home," the builders' magazine published by Time, Inc., is conducting a kitchen standardization round-table. These symposia are a favorite device for presenting informed opinion in its editorial pages. Among subjects to be discussed of particular interest to gas men are venting of clothes dryers and built-in ovens, and larger sizes for water heaters. Leroy Klein, Caloric Appliance Corp., is a member of the subcommittee doing the ground work for the final round-table discussion.

H. Carl Wolf
1891-1955



H Carl Wolf, consultant to American Gas Association since he resigned earlier this year as managing director because of ill health, died on June 26 at the age of 63. Services, attended by many of his friends and associates within the gas industry, were held June 28 at the Episcopal Church of St. James the Less, Scarsdale, New York.

Among many expressions of esteem was a statement by F. M. Banks, president, A. G. A., and president, Southern California Gas Co., who came from Los Angeles for the services. "The gas industry has experienced a great loss through the death of H. Carl Wolf," Mr. Banks said. "His life was dedicated to the advancement of our industry through improving the services of A. G. A. and its member companies. That was his ambition when he was elected managing director in 1945. The history of the Association since then reflects great progress toward the achievement of his goal. We know it remained his ideal until he died. His many friends and associates will always remember him for his tremendous ability and his devotion to the highest ideals."

Paying tribute to Mr. Wolf's "imaginative and constructive leadership, combined with tremendous personal loyalty and magnetism," C. S. Stackpole, present A. G. A. managing director, said that by his death "the gas industry lost one of its most enlightened and progressive champions."

Mr. Wolf had been a prominent executive in the utility industry for many years and was president of Atlanta Gas Light Company and its subsidiaries when appointed A. G. A. managing director. Born in Edwardsville, Ill., Mr. Wolf entered the utility industry after graduation from the University of Illinois with BS, MS and EE degrees.

He joined the Illinois Commerce Commission, became manager of the Edwardsville Water Co., and later served as chief engineer of the Public Service Commission of Maryland. After joining Central Public Service Corporation in Indiana, Mr. Wolf became vice-president of Consolidated Electric and Gas Co., and then president of Central Indiana Gas Co., Muncie, Ind. He went to Atlanta Gas Light Company in 1938 as president.

Mr. Wolf served in World War I as captain in the U. S. Engineer Corps, was in combat in France and later served with the American Peace Commission.

When Mr. Wolf submitted his resignation as managing director earlier this year, the A. G. A. Board of Directors tendered him a testimonial dinner as a tribute to his long and important contributions to the gas industry. Mr. Wolf was presented with an engraved testimonial of appreciation and with several gifts.

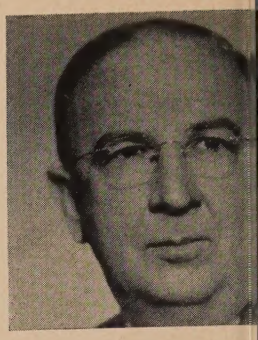
He had received a similar token of appreciation from the city of Atlanta when he was awarded a citation for his active participation in civic affairs there. In that city he had long been noted for his devotion to public and civic service.

Mr. Wolf is survived by his widow, the former Louise Burroughs, a son, Robert B., and a sister, Miss Doris Wolf of Edwardsville, Illinois.

For vice-presidents ▶

C. H. ZACHRY

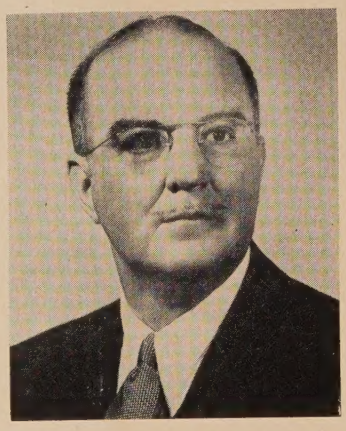
For directors



M. A. ABERNATHY

For president

DEAN H. MITCHELL



A. W. CONOVER

D. E. KARN

J. C. PETERSON

For treasurer ▶

VINCENT T. MILES

A.G.A. nominates for 1955-1956

P. E. BECKMAN

R. E. CRAWFORD

LYLE C. HARVEY

JOHN E. HEYKE, JR.

W. H. LIGON

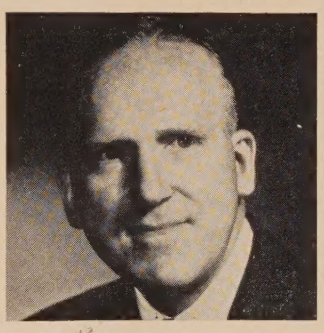
CHESTER L. MAY

R. W. OTTO

F. T. PARKS

F. ROCKWELL, JR.

EDWARD H. SMOKER



J. THEODORE WOLFE

D. K. YORATH

The selection of responsible industry leadership will be an important task facing the delegates at the American Gas Association Annual Convention in Los Angeles next October. The Association's General Nominating Committee has drawn up a slate of officers, directors and section chairmen. Represented are leaders from production and distribution concerns, manufactured, natural and mixed gas companies, pipeline and utility holding companies and gas appliance manufacturers.

The complete slate will be voted upon by the membership at an executive session during the Annual Convention, October 17-19. In accordance with Section 2 of Article X of the A. G. A. Constitution and By-Laws, any 50 company members may make additional nominations for any elective office, and 50 individual members may make additional nominations of sectional officers, by placing them in the hands of the Association's managing director not later than August 1.

The Nominating Committee recommends the election of a president, two vice-presidents, a treasurer, 15 directors, 11 section chairmen and vice-chairmen.

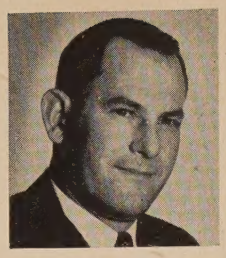
Elected at the 1954 A. G. A. Annual Convention, Atlantic City, the General Nominating Committee consists of:

Everett J. Boothby, chairman, president, Washington Gas Light Co., Washington, D. C.; E. I. Bjork, president, the Peoples Gas Light and Coke Co., Chicago, Ill.; Frederic O. Hess, president, Selas Corporation of America, Philadelphia, Pa.; D. A. Hulcy, president, Lone Star Gas Co., Dallas, Texas; W. M. Jacobs, vice-president, Southern California Gas Co., Los Angeles 54, Calif.; J. F. Merriam, president, Northern Natural Gas Co., Omaha, Nebr.; J. D. Roberts, vice-president, Mountain Fuel Supply Co., Salt Lake City, Utah; J French Robinson, chairman, Consolidated Natural Gas Co., New York, N. Y.; Charles G. Young, president, Springfield Gas Light Co., Springfield, Massachusetts.

The following list of nominations is brought to the attention of the American Gas Association membership, in accordance with the Association's Constitution and By-Laws:

chairmen

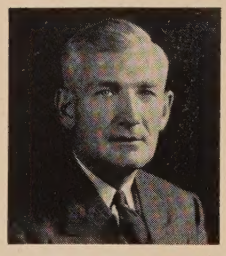
E. R. EBERLE
Accounting Section



J. H. CARSON
General Management Section

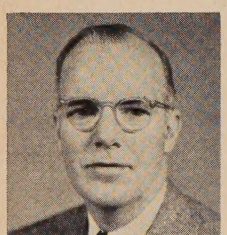
L. E. BIEMILLER
Industrial and Commercial Gas Section

J. H. COLLINS
Operating Section

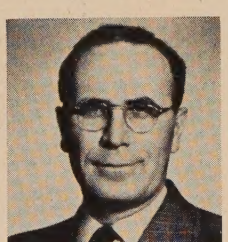


B. H. WITTMANN
Residential Gas Section

vice-chairmen

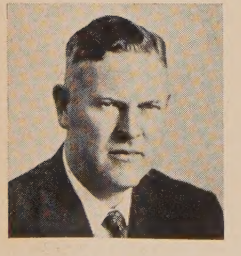


W. D. SWEETMAN
Accounting Section



LESLIE A. BRANDT
General Management Section

J. ROBERT DELANEY
Industrial and Commercial Gas Section



GROVE LAWRENCE
Operating Section

V. F. BITTNER
Operating Section

W. D. WILLIAMS
Residential Gas Section

For president—DEAN H. MITCHELL, president, N ern Indiana Public Service Co., Hammond, Indiana.

For first vice-president—C. H. ZACHRY, presi Southern Union Gas Co., Dallas, Texas.

For second vice-president—A. W. CONOVER, dent, Equitable Gas Co., Pittsburgh, Pennsylvania.

For treasurer—VINCENT T. MILES, treasurer, Island Lighting Co., Mineola, New York.

F. M. Banks, president, Southern California Gas Co., Angeles, Calif., is the Association's retiring president and become a director.

Newly nominated and re-nominated directors are:

M. A. ABERNATHY,* vice-president, United Gas Line Co., Shreveport, Louisiana.

PHILIP E. BECKMAN, vice-president in charge of operations, Pacific Gas and Electric Co., San Francisco, fornia.

R. E. CRAWFORD, president, Minnesota Valley Na Gas Co., St. Peter, Minnesota.

LYLE C. HARVEY, senior vice-president, Carrier C Syracuse, New York.

JOHN E. HEYKE, JR.,* president, Brooklyn Union Co., Brooklyn, New York.

D. E. KARN,* president, Consumers Power Co., Jac Michigan.

WISTER H. LIGON,* president, Nashville Gas Nashville, Tennessee.

CHESTER L. MAY, senior vice-president, Lone Star Co., Dallas, Texas.

ROBERT W. OTTO, president, Laclede Gas Co. Louis, Missouri.

F. T. PARKS,* vice-president, Public Service Co. of C rado, Denver, Colorado.

J. C. PETERSON, president, Manufacturers Light & Co., Pittsburgh, Pennsylvania.

W. F. ROCKWELL, JR., president, Rockwell Manufa ing Co., Pittsburgh, Pennsylvania.

EDWARD H. SMOKER, president, United Gas Impr ment Co., Philadelphia, Pennsylvania.

J. THEODORE WOLFE,* executive vice-president, more Gas & Electric Co., Baltimore, Maryland.

DENNIS K. YORATH, general manager, Northwe Utilities Ltd., Edmonton, Alberta, Canada.

ACCOUNTING SECTION

For chairman:

E. R. EBERLE, assistant to general commercial man Public Service Electric & Gas Co., Newark, New Je

For vice-chairman:

WILLIAM D. SWEETMAN, superintendent, custom counting department, The Peoples Gas Light & Coke Chicago, Ill.

GENERAL MANAGEMENT SECTION

For chairman:

JOHN H. CARSON, vice-president, The East Ohio Co., Cleveland, Ohio. *(Continued on page 38)*

* Re-nominated.

Conventioneers to tour Disneyland

Disneyland, the fabulous new West Coast entertainment center, will be the site of a gigantic western barbecue on October 18, to which all delegates and guests attending the American Gas Association-Pacific Coast Gas Association Convention in Los Angeles are invited.

"Disneyland is different from anything ever before offered, and we can promise delegates an evening they will long remember," said F. W. Seitz, Southern Counties Gas Co., chairman of the Entertainment Committee.

The Tuesday night barbecue will be staged around campfires, with authentic cowboy singing for color for the event. After the barbecue, the visitors will tour the four kingdoms comprising the fantastic empire that is Disneyland. These are:

Tomorrowland—a glance into the future with a giant space rocket, either 500 miles above the earth—or a trip to the moon. Also seen will be conceptions of highways, appliances and home installations of the future.

Fantasyland—which offers a Peter Pan ride on a pirate galleon over London to Never Never Land. Also a Snow White ride to meet the Seven Dwarfs. And a restaurant that is entered by a pirate ship.

Frontierland—where past history of America lives again, complete with Indians and leather stockinged frontiersmen. From a dock a 105-foot paddle-wheeler steamboat cruises American rivers.

Adventureland is the fourth kingdom in Disneyland. It offers the flora and the fauna of the paradises of explorers. Guests can visit Tahiti, Centraland South America, Africa, Asia and Australia on an explorer's boat. And they may end their visit by a trip of a turn-of-the-century railroad which circles the park reviewing all of its wonders.

The entertainment program was only one of the fine features covered in the excellent progress report made by subcommittees on arrangements for the Annual Convention to R. R. Blackburn, vice-president of Southern California Gas Co., chairman of the General Convention Committee.

Robert A. Hornby, executive vice-president, Pacific Lighting Corp., reported progress being made in obtaining general session speakers. Arrangements for the press room at the Biltmore Hotel and plans for advance publicity were reported by J. T. Van Rensselaer, Southern California Gas Co., chairman of the publicity committee. Other members of Southern California Gas Co. serving as subcommittee chairmen reported as follows:

W. A. Wilson told of arrangements for obtaining signs, public address systems and other props. Members of his committee will handle requests at each of the hotels where meetings will be staged.

The Housing Committee is working with the Los Angeles Chamber of Commerce. According to R. F. Ogborn, adequate housing will be available for all delegates. Mr. Seitz reported on plans for a ladies' sightseeing tour, a style show and the card party, in addition to the Disneyland barbecue party. Plans are being made for the President's reception and dance.

A registration list will be published, G. S. Coates reported. The Southern Counties executive said each registration booth would be informed of registrations made at other hotel booths. The transportation and hospitality committees, under C. A. Renz and F. A. McCandlies, reported progress. R. W. Johnson said that although it might not be possible for large groups to play together, arrangements will be made to see that anyone wanting to play golf may do so.

Kurwin R. Boyes, secretary and convention manager of A. G. A., reported on preliminary plans for convention meetings of the various Sections of A. G. A.

As chairman of General Convention Committee, R. R. Blackburn, Southern California Gas Co., makes plans for A.G.A.-PCGA annual meeting

The Accounting Section's sessions will be held at the Hotel Statler. D. W. Peterson, Minneapolis Gas Co., coordinator of the General Activities Group, will preside at a meeting in the Los Angeles Room, on Monday afternoon, October 17. The section will sponsor a luncheon and afternoon session in the Sierra Room on Tuesday, with A. T. Gardner, Delaware Power & Light Co., chairman of the Section, presiding.

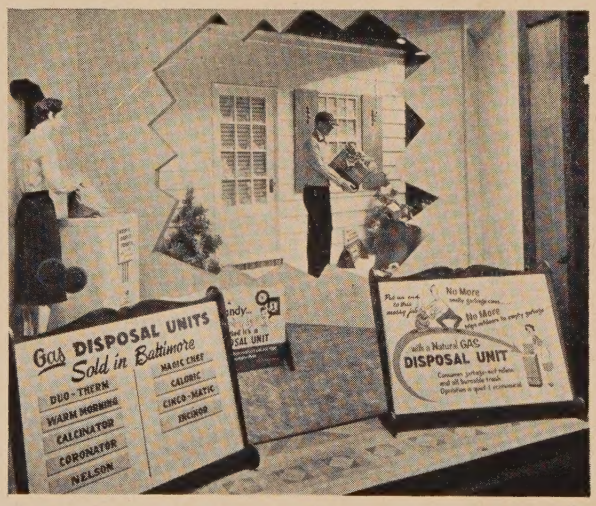
The chairman of the PCGA Accounting section will greet delegates and participate in both meetings. Plans include presentation of the Order of Accounting Merit awards, a paper on electronic accounting, a customer relations panel, and discussions on taxes, mechanization, incentive compensation and cost controls.

(Continued on page 50)

Action Program — Combination Company Style

Gas industry's 15-point program serves as guide and spur to Baltimore Gas and Electric's gas department, with outstanding results achieved in both industrial and residential fields

WINDOW DISPLAYS



Promote each branch vigorously and intelligently." Over many years this has been the basic policy of Baltimore Gas and Electric Company in developing the maximum potential of gas and electric business throughout its service area.

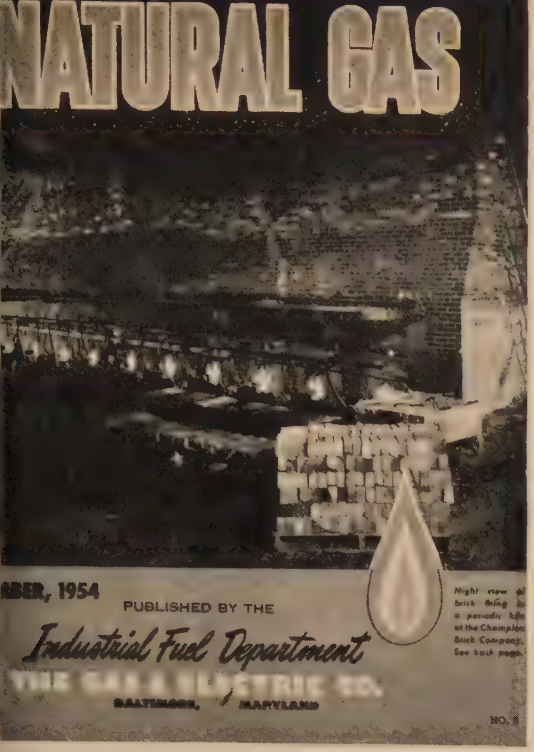
Separate departments—gas and electric—operate in industrial and commercial promotion and sales, and the above policy has produced keen competitive effort and aggressive selling techniques. In the domestic field, where promotion work is unified, thoughtful planning and capable direction of activities ensure the effective development of both services.

Management maintains an impartial attitude, imposing only the condition that no undertaking for either service can be detrimental to or reflect unfavorably upon the other, and that the fundamental concern must be the customer's best interest. Where circumstances indicate almost equivalent advantages, the customer is supplied with all the facts and figures in order that he may make his own choice.

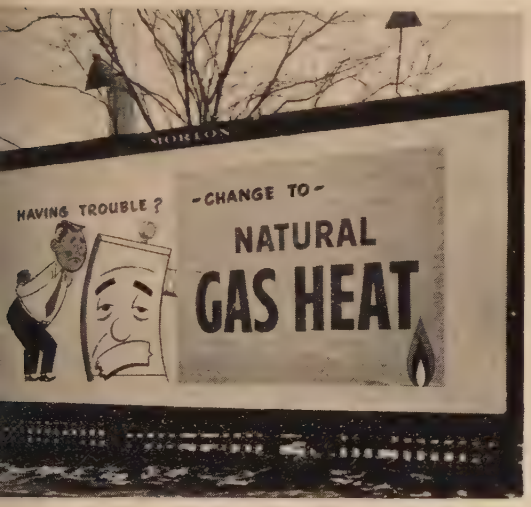
Economics work in favor of gas with respect to many uses in Baltimore. This, augmented by the determination of the company's management to adhere to the 15 points of the Gas Industry Development Program and the advent of natural gas in 1950, has produced results exciting enough to gladden the heart of many a gas man.

President Charles P. Crane and Executive Vice-president J. Theodore Wolfe are justifiably proud of their gas sales division which they believe to be doing one of the best jobs for gas anywhere in the country. The Baltimore company serves over 320,000 residential gas customers and 414,000 residential electric customers. Most of these are in the metropolitan district of Baltimore and use both services.

Wherever gas is available, the company promotes *only* matchless gas ranges



INDUSTRIAL GAS



OUTDOOR ADS

for cooking and *only* automatic gas water heaters for water heating. Gas house heating is strongly promoted wherever that service is available. And gas has been gaining steadily with those uses in the last five years.

The results since 1950 have been sanguine enough for any adherent to the Action Program for Gas Industry Development. Below are saturation percentages for two major gas appliances in the Baltimore gas territory since 1950.

These results have all taken place in a territory where there are no gas-only distributors and practically no gas-only dealers. The company estimates that its own sales division accounts for from 10 to 20 percent of all gas appliance sales. It is fairly obvious, then, that this combination company has the confidence and good will of its dealers and customers in the acceptance of gas equipment.

	Automatic Water Heaters	House Heating
1950	31.5	9.5
1951	35.9	13.1
1952	39.4	17.4
1953	43.5	21.6
1954	48.1	26.6

While historically Baltimore was the first city in the United States to be serviced with gas (for lighting), it was not until the advent of natural gas that gas heat became competitive in both new and old homes. The sales division also went into high gear to upgrade gas ranges and automatic water heaters. Both gas and electric dryers are promoted in combination territory.

When the Gas Industry Development Program was first proposed and enthusiastically endorsed by both gas utilities and manufacturers, Baltimore's Executive Vice-president Ted Wolfe called upon the sales, promotion, and operating departments to report to him the then exist-

Be sure to visit booth 135 at the Home Show
See the many ways
NATURAL GAS APPLIANCES
can bring modern living to your home
Year 'Round Air Conditioning
Automatic Gas Ranges
Automatic Gas Water Heaters
Do you want more business?
It's there waiting for you through the sale of Automatic Natural Gas Water Heaters!
THE GAS & ELECTRIC CO.
BALTIMORE
"Keep your eye on the kitchen"
. . . and don't forget, there's money in the sale of AUTOMATIC GAS WATER HEATERS!
The Gas & Electric Co.
BALTIMORE
Compare it with a Matchless GAS RANGE and you'll see—
Visit your APPLIANCE DEALER soon . . . be sure to see the new
Matchless GAS RANGES

NEWSPAPERS **All uses of natural gas are vigorously promoted in solid schedule of newspaper ads. Within territory served by gas, Baltimore Gas and Electric promotes only matchless gas ranges, seeks dealer cooperation**

DEALERS **Signs on dealer's trucks are example of aids offered by utility. Emphasis on base load appliances is directed toward dealers who in past have been primarily interested in selling gas house heating installations**

ing practices in relation to GID's 15 points. After full discussion, it was decided, and all department heads were then informed, that these GID points were to be considered company policy and that changes would have to be made wherever activities did not adhere to those policies.

Today, Baltimore Gas and Electric is pushing the Action Demonstration Program throughout its service territory. This program is being applied for all types of gas uses—residential, commercial, and industrial. The Appliance Sales, Residential Promotion, and Industrial Fuel departments of the company's Sales Division are proving that a combination company can do the sort of job for gas that must be done everywhere in order to maintain and increase the use of gas and gas appliances.

Here are some of the things that the Baltimore company is doing these days:

Residential

In the new building field, company representatives—20 field men and a supervisor—contact the builder or contract owner of each new home to make certain that gas is installed for space heating, water heating, and cooking. The installation of gas dryers and incinerators is also encouraged. Practically all new homes around Baltimore now install gas for house heating. The company also advertises in local builder trade papers.

In the existing home market, gas appliance dealers whose primary interest in the past several years has been gas house heating are being urged to extend their activities to include water heaters, ranges, clothes dryers, and incinerators. Plumbers are being told the advantages of selling more high quality gas appliances. Intensive sales efforts have been directed toward replacement sales in existing homes.

Some of the major campaigns have been made during the local Oil Heat Association's big pushes to sign up service contracts. In one recent campaign, newspapers, television, radio, and truck signs were used, together with direct mail offering four 100-watt electric bulbs for permission to make a gas house heating survey.

Nearly 1,500 such surveys were made, turned over to dealers, and upon completion of the sale, the purchaser was given a $20 floor or table lamp. This one promotion resulted in nearly 1,000 sales of gas house heating in existing

(Continued on page 52)

Sees gas lines linking Canada-US

By F. M. BANKS

President, American Gas Association
President, Southern California Gas Company

• Excerpts from an address before the Canadian Gas Association's 48th annual convention, Niagara Falls, Ont., June 5-9.

The gas industry knows no horizons, nor does it recognize any geographic borders, either interstate or international.

This becomes increasingly evident as the natural gas systems push forward across our continent. These great arteries now reach into almost every corner of the United States. I am sure I echo the hopes of most of the members of the Canadian Gas Association when I express the sincere wish that natural gas transmission lines soon will crisscross this rich and productive dominion.

No crystal ball is needed to forecast what stimulus could be given to Canada's economic system if its great industrial and residential centers could be served with natural gas at favorable prices. The Dominion has experienced a remarkable industrial growth during recent years. With natural gas available to stimulate further industrialization, progress over the next decade could be even more outstanding.

Your country is rich in natural resources and production ingenuity. The advent of natural gas in important quantities would offer a welcome complement to these attributes.

I would like to quote a few paragraphs from a paper by Ed Falck, a leading consultant to gas companies. He stated:

"Consolidated development of the energy resources of the North American Continent makes sense from the standpoint of both economics and national defense. Coal, oil, gas and water power are available in Canada, the U.S. and Mexico in quantities which vary greatly in relationship to the requirements within each country. There have for many years been exports and imports of fuels between these neigboring countries.

"The export and import of natural gas and electricity between the U.S. and Canada is in accordance with the basic policies established by the governments of these countries. On October 26, 1950, a Statement of Principles for Economic Cooperation was issued pursuant to an exchange of notes between the Secretary of State and the Canadian Ambassador. The basic agreement was as follows:

" 'It is agreed therefore, that our two governments shall cooperate in all respects practicable, and to the extent of their respective executive powers, to the end that the economic efforts of the two countries be coordinated for the common defense and that the production of resources of both countries be used for the best combined results.'

"The horizons for Canadian-U.S. cooperation are unlimited. They broaden according to the mutual requirements of the two nations, and as they broaden in terms of economic progress, our interdependence becomes even more significant."

Many electrical interconnections exist today between the U.S. and Canada. Also there are several connections existing now or proposed for the near future which involve the interchange of natural gas. At Detroit, surplus U.S. natural gas is delivered to Ontario. In Alberta, natural gas from Canada is brought into Montana.

A proposal still rests before the Federal Power Commission seeking the delivery of gas from the Trans-Canada system to the Northern Natural Gas Company. A recently completed pipeline now brings gas from the same line that supplies New York and New England to supply Toronto.

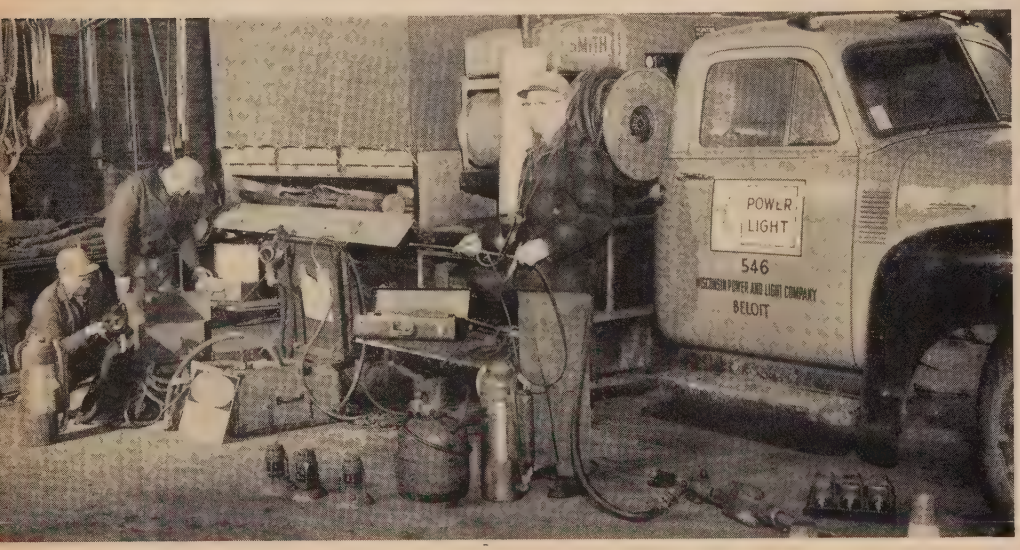
Several proposals have been submitted to the FPC to bring gas from the Peace River Reserves in Alberta and British Columbia to the States and at least one plan is before the FPC.

Each of these interchanges add reserves of natural gas needed to take care of future requirements and demands of consumers who have a tremendous stake in the future of the gas industry because of the large money investment in gas utilization equipment.

Unofficial estimates now place Canadian reserves between 16 and 20 trillion cubic feet. But I am confident that the vast reserves in this great Do-

(Continued on page 50)

Management's direct interest in safety at Wisconsin Power and Light is reflected by Central Safety Committee, made up of top operating personnel, which meets every two months



Periodic inspections of safety equipment, protective equipment, motor vehicles and buildings are carried out regularly by qualified personnel and special reports made

The right way to do a job is th
and Light designs, standardize

"Follow the Leader" safety series—
Wisconsin Power builds its program around engineering, education, enforcement

Three E's of safety earn low frequency rate

By EVERETT D. RAVN
Safety Director
Wisconsin Power and Light Company

Safety is a big program with the Wisconsin Power and Light Company. Everyone knows that an effective safety program is a never-ending job, one that needs attention every hour of the day. Our company's program is based on the three "E's" of safety—Engineering, Education and Enforcement.

The Wisconsin Power and Light Company serves retail customers in 33 counties and 380 communities in Wisconsin. The effectiveness of our safety program, which reaches throughout the entire company, is demonstrated by the fact that there has been a 30 percent reduction in company accidents during the past five years, even though employment has increased 27 percent, and manhours

ng department at Wisconsin Power
rk procedures for specific operations

Once safety procedures are set, enforcement becomes the rule. Since 1950, Wisconsin Power and Light has had only 36 medical injury cases among its gas operations employees

Enforcement depends upon education. Supervisors meet monthly for safety discussions, then carry their know-how to the field in regular group meetings within departments

worked have increased 16 percent.

Our company has a five-year average frequency rate of 2.0, as compared to the National Safety Council's average utility frequency rate of 7.25 for 1954. The company has received many national and state awards for its safety program, including a top award in 1954 from the Accident Prevention Committee of American Gas Association.

Gas employees of the Wisconsin Power and Light Company—215 of 2,000 company employees, have compiled an outstanding record, working 1,919,091 manhours without a losttime accident as of February 1, 1955. This record dates back to July 10, 1950, and during the entire time there have been only 36 medical injury cases.

Safety in our company is a cooperative affair, with management and employees working together to build a safer company. Many years ago, a Central Safety Committee was established to study our over-all safety program.

The vice-president in charge of operations and sales serves as chairman of this committee, and the safety director is secretary. Other committee members include the vice-president in charge of engineering, chief gas and water engineer, chief electrical engineer, one plant manager and one district manager who are alternated each year, and the union business manager. This committee meets every two months to study the company's safety program and progress.

The Wisconsin Power and Light Company is divided into 14 districts; there are four plants and the engineering group. Each has its own safety committee, composed of a chairman, the district or plant manager, operating superintendent, representatives of the gas, water and electric services and the district union representative.

Wisconsin Power and Light Company supervisors and foremen are the key people in our safety program. Safety is an important item at each monthly supervisors' meeting. In addition, supervisors hold group safety meetings for gas, line, office, service departments, etc. At these meetings, safety rules are discussed, lessons from experience related, seasonal hazards pointed out, operation of equipment studied, safety demonstrations given, unsafe practices checked and safety suggestions advanced.

One of the highlights of our safety program is our yearly all employee-wives Christmas safety dinners held in each district and plant. At this time, awards for working safely are presented. These awards are in the form of certificates, wallet cards and personalized safety pencils.

Inspections are made periodically in our districts and plants by qualified personnel. Special forms for inspection of tools, protective equipment, motor vehicles, buildings, and gas installations

Safety instruction and supervision are not confined to meeting. On-the-job conferences, "tail gate" sessions bring Wisconsin Power's safety story right down to grass roots

are provided. These reports are used to correct any unsafe conditions, hazards or faulty equipment.

The engineering department plays an important role in our safety program-designing, standardizing and preparing work procedures. At present, a new gas manual is being readied for distribution to gas employees. It covers construction, installation, maintenance and standards. A new gas safety rule book has just been written which covers specific safety practices involved in the company's gas operations.

The purchasing department also plays an active role in the company's safety program as a member of the standards committee, and works closely with the safety department on other phases of the program.

Safety training is the key to our safety program. Supervisors, who have been selected by means of tests, interviews and work experience, receive special training in responsibility before assuming the supervisor's job. All employees get continued safety training at the regular group meetings, tail gate conferences to insure safe methods and equipment are used on each job, and on-the-job training is carried on continually. In addition, each employee is trained in the use of artificial respiration, new methods and use of new equipment.

Extensive records are kept by the safety department. All accidents are reported to the immediate supervisor. If first aid is required, it is noted on the employee's time card. Medical cases are reported to the safety department and require a surgeon's report.

Motor vehicle, public accidents and damage to company property records also are sent to the safety department. A running report and cause analysis of accidents is kept, and an annual report is issued to the field, listing all accidents, manhours worked, frequency and severity rates and other pertinent safety information.

When losttime accidents occur, an investigation is conducted. Making this investigation are members of the safety department, the district manager, district safety chairman, district union representative, union business manager and key personnel concerned with the accident. A report is made and published throughout the company.

Safety promotion plays a vital role in our program. During recent years, company-wide contests have been held. Some were Election Campaigns, Olympic Games and a Crusade for Safety. These contests were based on the individual district and plant safety records, and cash awards were given for the top records.

In 1954, the company sponsored a "grass roots" level safety promotion. Each district and plant worked out its own safety program. Each group promoted safety in its own way—some had bowling matches, others had horse races and individual suggestion systems. Awards were based on the promotions—how effective they were, how much promotion work was done, etc.—and the district and plant safety records.

This "grass roots" approach was most effective and this year's safety promotion follows along the same lines. Each district and plant is charged with planning a program. Quarterly budgets are available to carry out these programs. To tie the whole company program together, a parakeet mascot will be awarded each month to the district or plant with the best safety record. Further interest was created in the safety program by having a contest to name the parakeet.

While the foundation of the Wisconsin Power and Light Company's safety program is based on the three "E's", a fourth "E" has been added: Enthusiasm to give the program spirit and vitality.

Educational materials elucidate mechanics of gas meter

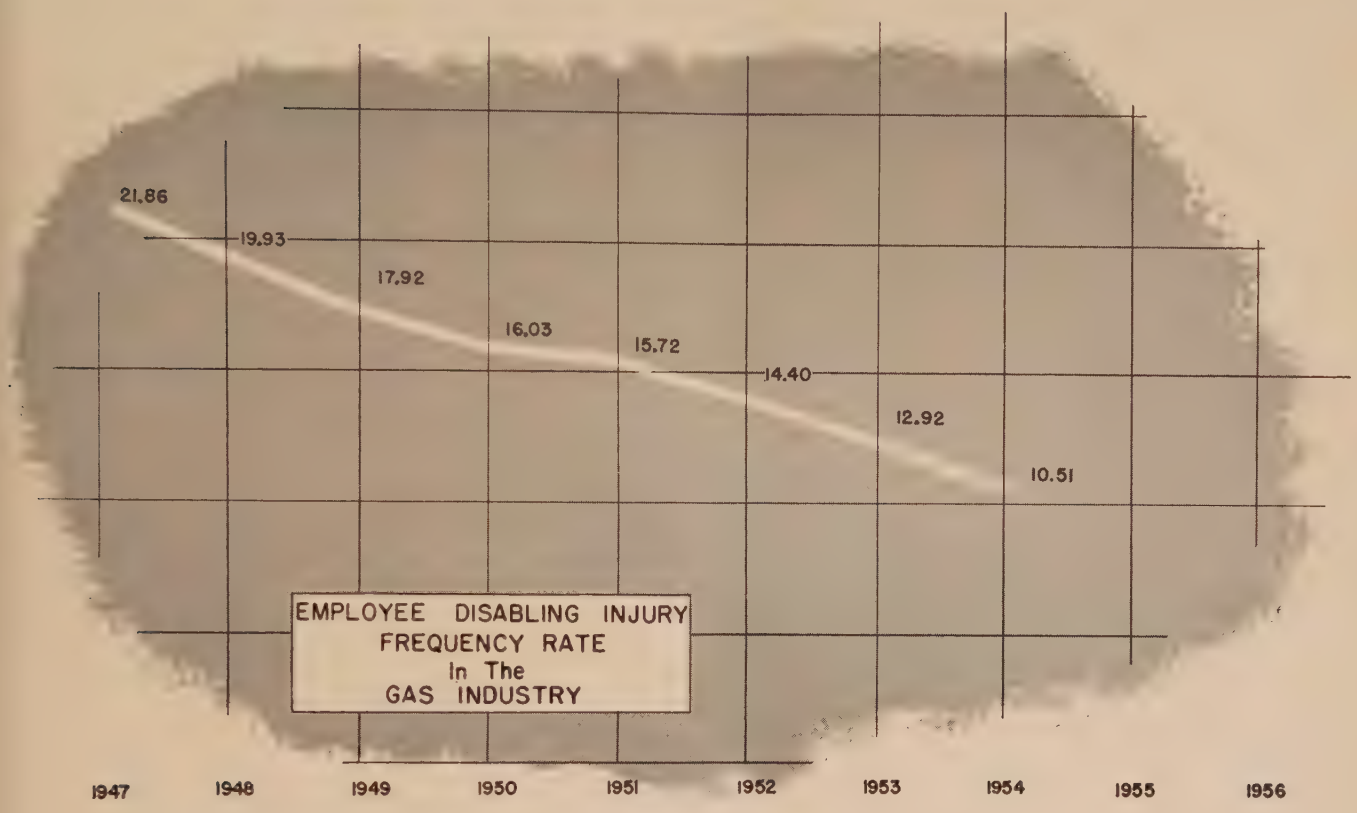
EASY-TO-READ scientific explanations of "How Your Gas Meter Works" have been published in kit form by the American Gas Association, in cooperation with the Gas Meter and Regulator Division, GAMA, and the approval of the National Science Teachers Association.

Prepared by Burnett Cross, educational advisor, these kits for use in junior and senior high schools consist of classroom wall chart, teacher's guide, and 40 student home study sheets. They are part of a series issued under the general heading, "Science in Action in the Gas Industry."

Three gas meter manufacturers have agreed to supplement their financial assistance in the preparation of this kit by offering utilities cut-away meters for classroom use, complete with carrying case. These meters can be given to schools directly, or kept by the utility and lent to schools for demonstration purposes.

The price of the kits including postage is 85 cents each, or 60 cents, plus transportation, in bulk. Meters cost $25. Both are available from A. G. A. Headquarters. When ordering cut-away meters, specify which of the three brands is desired—American Meter Co., Rockwell Manufacturing Co., or Sprague Meter Company.

Accident rate continues decline



By Bureau of Statistics
American Gas Association

During 1954 the gas utility and pipeline industry achieved its lowest accident rate since the American Gas Association began compiling such statistics in 1929. Last year there were 10.51 disabling injuries per million man-hours of exposure, 18.7 percent lower than in 1953, and 8.5 percent lower than the previous record of 11.49 in 1933.

Last year marked the seventh successive annual decline in accident frequency rates from the post-war peak of 21.86 injuries per million man-hours in 1947. The number of disabling injuries per 100 employees declined during 1954 to 2.14, a decrease of 19.9 percent from the 1953 rate of 2.67, and down 14.7 percent from the previous low of 2.51 achieved in 1938. These data have become available from the annual survey of gas company employee accidents, conducted by the A. G. A. Bureau of Statistics for the Accident Prevention Committee.

The 1954 severity rate, of 0.69 days lost because of disabling injuries per 1,000 hours worked, also represented a record accomplishment for the industry's Accident Prevention Program. The severity rate was 20.7 percent lower than in 1953, and 4.2 percent lower than the previous record achieved in 1939.

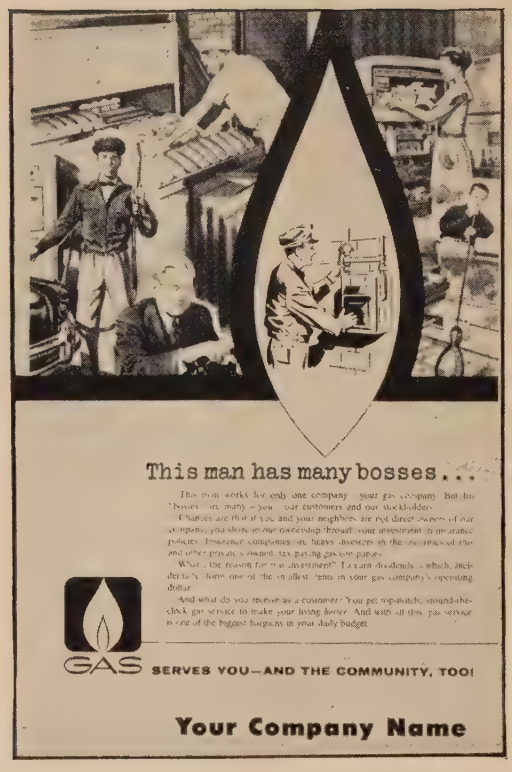
There were 802 fewer disabling injuries in 1954 than in the previous year, and the number of fatalities and permanent total disabilities declined from 29 to 24. There were 141.3 days lost because of disabling injuries per 100 employees during 1954, a decline of 38.6 days from the previous year, or an improvement of 21.5 percent.

The improvement in the industry accident frequency rate reflects better records for all companies distributing all types of gas. There were 10.42 disabling injuries per million man-hours worked in 1954 for natural gas companies, 17.0 percent fewer than the preceding year.

The accident frequency rate for manufactured and mixed gas companies declined 23.6 percent to 10.90 injuries per million hours, while liquefied petroleum gas companies had an accident frequency rate of 10.58 injuries.

The frequency of motor vehicle accidents per 100,000 miles traveled decreased in 1954. Vehicles of natural gas utility and pipeline companies were involved in 1.27 reportable accidents per 100,000 miles traveled, while the rates for manufactured and mixed gas, and liquefied petroleum gas, were 3.23 and

(Continued on page 51)



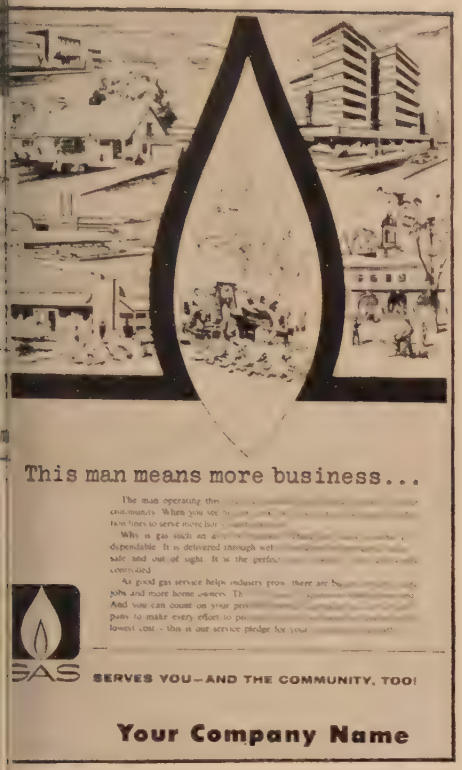
● *New A.G.A. mat service for member gas companies features joi*

PR ad series presents your gas service story

a PAR activity

"Gas Serves You—and the Community, Too!" is the theme of a new community relations advertising mat service produced for member companies of American Gas Association. A major activity of the 1955 A.G.A. Public Information Program, a PAR activity, the ad series is designed to dramatize the local gas company as an important community citizen under the free enterprise economy.

Six introductory ads, for release on a monthly basis from July 15 through December 15, are contained in a brochure mailed to nearly 400 gas companies early in July. These ads seek to interpret the local gas company's triple role: (1) as a growth-producing, tax-paying citizen of the community; (2) as



employe team and their contributions to local community growth

the community's supplier of a low-cost but premium domestic, commercial and industrial fuel, and (3) as a dynamic part of the American free enterprise system.

Copy and art of the first six ads show how the typical American gas company, in fulfilling its community responsibilities and opportunities for service, builds up its local area. In so doing, the local gas company exemplifies the country's free enterprise system in action.

Each ad is built around the job of a specific member of the gas company employe team. Copy stresses the interdependence of company and community and underlines the heavy stake that each has in the prosperity of the other.

Strong emphasis is also placed on the contributions the privately-owned and locally-managed gas company makes to community stability and growth through taxes, payrolls and by supplying a premium multi-purpose fuel.

Ad number one ("She's Helping You with the Laundry") shows the gas company typist, a skillful member of the gas company team, who helps to bring new efficiency and freedom to the community's homes.

Ad number two ("This Gal Has Connections") dramatizes the gas company switchboard operator as a focal point for the story of 24-hour year-around service.

Ad number three ("This Man Has Many Bosses") explains how the public is the "boss" of its local gas company in two ways: (1) as the customer whose needs are always paramount, and (2) as direct and indirect investors in gas company securities.

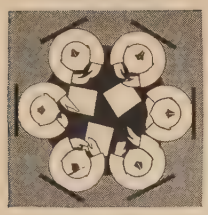
Ad number four ("Rx For Community Growth—Vitamins G-A-S") emphasizes that the flexibility, controllability and economy story makes gas the ideal domestic, commercial and industrial fuel. Modern gas service encourages and promotes community growth in all three customer areas in the best tradition of competitive private enterprise.

Ad number five ("Say Mister—Can You Fix This?") uses the service man to illustrate the gas company's informal and neighborly relations with its customers.

Ad number six ("This Man Means More Business") notes several important ways in which the gas company helps its community expand by providing dependable gas service for business, industry and home.

Copy themes and art treatments in-

(Continued on page 55)



Industrial relations round-table

Prepared by
A. G. A. Personnel Committee

Edited by W. T. Simmons

Assistant to the Personnel Manager
Philadelphia Electric Company

● **Check References by Phone**—A recent article by Glen Galles, Personnel Manager, Minneapolis-Honeywell Regulator Company, discusses the use of the telephone to check references. Mr. Galles states that until last year they used to check applicant references by mail, but their experience showed that the answers were not quickly obtained and they received replies from fewer than 75 per cent of those requested. By using the telephone they get answers in a hurry and receive replies from nearly 100 per cent of those asked. The cost per applicant is 45 cents by phone in contrast with 18 cents when the reference is checked by mail. As soon as one of the interviewers finishes talking with an applicant who appears desirable, he phones two former employers for reference information. The interviewer uses a check sheet to ask questions and record the data. With more freedom to ask and modify questions to suit the particular situation, Mr. Galles believes that his company receives a better check by using the phone.

● **Supervisory Training**—Should you be interested in further information concerning this subject, write American Management Association (330 West 42nd Street, New York 36) about its brand new Supervisory Development Service. Available on a subscription basis to members and non-members.

● **Rapid Reading Kit**—*Do-It Yourself idea has spread to rapid reading.* This kit will help you read groups of words instead of one word at a time. If you now read 300 words a minute, an investment of $12.95 may boost your speed to 600, or even 800! Free booklet. Foundation for Better Reading, 20 W. Jackson Blvd., Chicago 4.

● **Plant Insight for Clergy**—Forty clergymen of all faiths got a glimpse of "between-Sunday" living recently at the Hillside, N. J., plant of Bristol-Myers Company. The idea was to help local spiritual leaders get an understanding of working conditions, jobs, and life generally within the plant.

It was not a normal open house—only those clergymen attended whose employee-parishioners asked company executives to extend them an invitation. During the visit Bristol-Myers made a sincere effort to give the clergymen the type of information they need to talk to parishioners in down-to-earth language about this important side of their lives.

Mixing religion with work may be open to question. This approach, however, seems to satisfy a definite need without encroaching on anybody's personal freedom.

● **Handbook on Veterans' Rights**—You may be interested in the recently revised Handbook covering the re-employment rights of veterans. It contains 483 questions and answers, pertinent statutes, and digest of court decisions. The publication is available from the U.S. Government Printing Office, Washington 25, D. C. Ask for *Re-employment Rights Handbook* (Revised).

● **Industrial Films**—*Everywhere You Look* is designed to encourage employees to take action on their ideas for improving company operations, and to stimulate original thinking to that end. It describes in detail one company's suggestion box system and how it pays off for both company and employees. Sound slide film, color. Available for sale or free loan from: General Electric Co., 570 Lexington Avenue, New York 22.

● **A New Concept of Management**—In the May-June, 1955 issue of *The Harvard Business Review,* there is an article entitled "Skyhooks—With Special Implications for Monday through Friday" by O. A. Ohmann, assistant to the president, the Standard Oil Company of Ohio. This presentation is an attempt to think through the constantly changing and expanding role of the business executive rather than to state clearly formulated conclusions. The author considers his approach "frankly experimental." He states: "It stems from the repeated experience I have had with certain executives who seem to know all about the art and science of management and yet are quite ineffective, and with other executives who seem to violate most of the rules in the book and yet are extremely successful. Experiences of this sort led me to conclude that the explanation lies in the value structure of the individual's philosophy."

Mr. Ohmann believes that the use which the executive can make of new principles and concepts depends to a large degree on the inner motives and philosophy of the man himself.

● **Court Decision**—*"Hard Bargaining" Upheld*—Reminding the NLRB that the statutory duty to bargain does not require employers to agree to union proposals or to make concessions, the Court of Appeals for the Sixth Circuit has rejected a Board finding that an employer's firm stand on his own proposals constituted a refusal to bargain.

The court ruled in NLRB vs. United Clay Mines Corp., where the Board had held by 3-2 majority in 1953 that management refused to bargain in good faith because it rejected certain union demands and insisted on its own counterproposals throughout negotiations, which extended over a year. Two dissenting Board members felt that management had merely engaged in "hard bargaining" as it had the right to do.

Agreeing with the dissenting Board members, the court pointed out that the Act expressly provides in Section 8(d) that it does not require agreement or concessions, and that the Supreme Court has ruled that it does not require a party "to engage in fruitless marathon discussions at the expense of frank statement and support of his position," nor does it authorize the Board to "compel concessions or otherwise sit in judgment upon the substantive terms of collective bargaining agreements."

Analyzing the Board's reasoning, the court found it had stressed two factors—that the union made many concessions while the employer made very few, and the company stood on its first conterproposal and refused to submit others. To the first reason the court replied "we find nothing in the Act which requires an employer to abandon a settled position on a certain issue because of either the quantity or quality of concessions offered by the union in the hope of securing such abandonment. It is still a matter of bargaining." It added with respect to the Board's second reason that "the statutory right to decline to make a concession includes the right to stand firmly on a proposal previously made and not accepted."

In conclusion the court stated that "in our opinion, the matter resolves itself into purely a question of hard bargaining on the part of the company. It is not for the Board or the court to determine what in their opinion the company should have agreed to, and, in effect, make the contract for the parties."

● **Retain Your Records**—It is not enough that employers subject to federal wage-hour laws pay at least the minimum wages and required overtime. These employers must also maintain the records required by these laws and retain such records for the required period of time.

If retention of voluminous records for a period of years presents a storage problem consider adopting the practice of microfilming the records. This method of preserving records is permissible under the Wage-Hour Law if the following conditions are met: Adequate means are available for inspecting the microfilms, and the employer is prepared to make any extension, recomputations, or transcriptions of the information contained on the microfilms which may be requested.

Those employers under the Wage-Hour Law should keep payrolls, certificates, union agreements, and notices three years, while employment and earnings records, wage rate tables, work time schedules, order, shipping and billing records (customers' bills etc.), records of deductions from or additions to pay should be kept two years.

● **NLRB Rulings**—*Automatic contract and elections*—The National Labor Relations

(Continued on page 38)

Equity funds—source and application

By Bureau of Statistics
American Gas Association

During the post-war period total assets of the gas utility and pipeline industry have more than doubled, rising from $5.95 billion at the end of 1945 to $13.68 billion at the close of 1953.

Similarly the total original cost of utility plant in service has increased from $5.05 billion to $11.69 billion, while new construction expenditures have aggregated $7.9 billion.

Operating revenues have almost tripled, rising from $1.41 billion to $4.13 billion, and total net income has increased from $167 million annually to $393 million.

To accomplish this vast expansion the gas utility industry has assumed a position as one of the most important issuers of equity securities and debt obligations. The American Gas Association regularly prepares information on the volume and costs of new security issues. These data indicate that during the post-war years, total security issues of gas operating and holding companies aggregated $6.54 billion; new issues of companies distributing both gas and electric service, with some unknown proportion of the amount being attributable to gas operations, was $6.26 billion.

The segregation of these amounts between debt and equity issues is outlined below.

GAS INDUSTRY NEW SECURITY ISSUES, 1946-1953
(Billions of dollars)

	Total	Debt	Equity
Gas operating and holding companies	6.54	5.31	1.23
Combination gas and electric companies	6.26	4.23	2.03
Total	12.80	9.54	3.26

No comprehensive information has previously been available relating to the disposition of funds raised by the issuance of new securities, and to the sources of funds needed for expansion. Such analysis would be most complicated on a total industry basis because of mergers, consolidations and non-availability of complete and continuous statistics for some companies.

However, useful information was continuously available for a large segment of the industry; a sample was selected from the larger companies representing about half of the industry. It is felt that the resultant data, as outlined below, are validly representative of the entire industry's financial patterns.

Nearly 60 percent of the funds raised by the industry during the post-war period was obtained through issuance of either long or short term debt. (Short term issues have been included in one combined category because of the need for refinancing and conversion to long term obligations.) The issuance of common or preferred stock accounted for 16 percent of total funds, while one dollar in seven was obtained from depreciation accruals. Retained income represented only 7 percent and remaining amounts were obtained by effecting reductions in liquid assets.

More than two-thirds of the funds obtained were directed to the industry's new construction program while one-fourth were utilized in the retirement or refunding of debt issues, and the remainder were devoted, in small amounts, to miscellaneous purposes. The illustrations indicate, for the gas operating and holding companies, the relative dollar magnitude of the principal categories. No comparable presentation has been attempted for combination gas and electric companies because of the problem of segregating the disposition of funds be-

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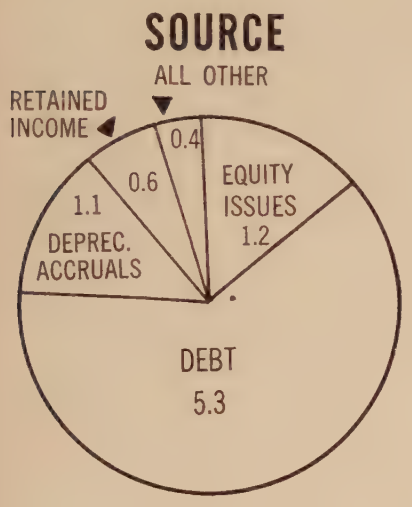
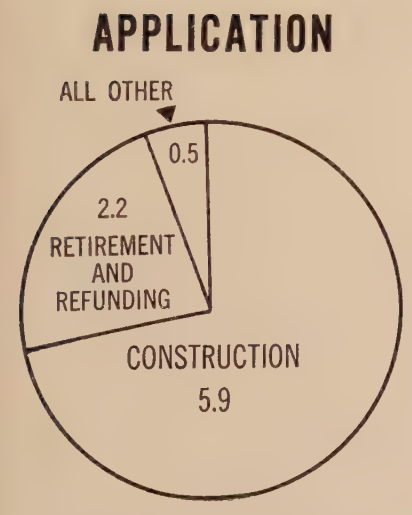


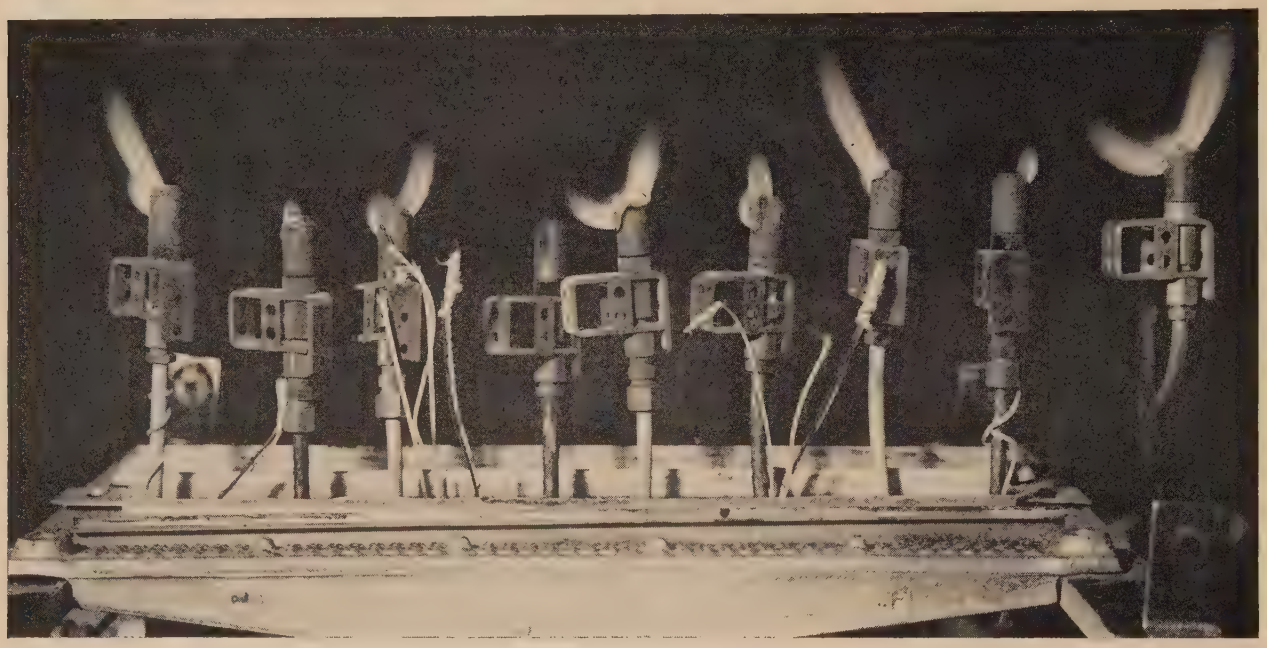


TOTAL - 8.6

SOURCE AND APPLICATION OF FUNDS, 1946-1953
BY TYPE OF COMPANY
(Percentages)

Source	All Gas Companies	Pipeline Companies	Distributing Companies
Equity Issues	15.7	16.8	14.9
Debt	58.6	62.7	55.4
Deprec. Accruals	14.1	11.7	15.9
Retained Income	6.8	5.3	8.0
All Other	4.8	3.5	5.8
Total	100.0	100.0	100.0
Application			
Construction	67.9	70.1	66.1
Retirement Refunding	25.4	24.0	26.5
All Other	6.7	5.9	7.4
Total	100.0	100.0	100.0

Test pilot burner materials



Pilots used in Chicago pilot burner outage experiments after full year of operation. Flame at right shows length at start

a PAR activity

The effects of various materials used in pilot burner assemblies and various fuel gas compositions on the formation of foreign deposits in gasways at elevated temperatures are discussed in a recent bulletin published by the American Gas Association Laboratories.

The bulletin has been published as Research Bulletin No. 69 "Research in Pilot Burner Design, Construction and Performance—Second Bulletin—The Effects of Pilot Burner Assembly Materials and Gas Composition on Pilot Burner Outage at Elevated Temperatures." It summarizes a research investigation designated as Project DGR-5-B sponsored as a PAR Plan Activity by the Association's Committee on Domestic Gas Research.

Previous studies related to this subject sponsored by the Committee on Domestic Gas Research are as follows:

Bulletin No. 42—"A Study of Bi-Metallic Thermal Elements" (February 1947).

Report No. 1123-A—"Research Pilot Design, Construction and Performance" (March 1949).

Bulletin No. 57—"Research in Pilot Burner Design, Construction and Performance—First Bulletin—Factors of Design Affecting Primary Air Injection and Flame Characteristics" (July 1950).

Bulletin No. 64—"A Study of Thermocouple-Type Elements for Automatic Ignition Systems" (May 1951).

The advantages of added convenience and safety to be gained by the use of automatic ignition systems have rapidly increased their use in contemporary gas appliances. These systems provide for safe ignition of appliance main burners and prevent the escape of unburned gases in the event of ignition failures. Most applications of such systems made in accordance with the manufacturers instructions will function quite satisfactorily for the life of the appliance. However, the material employed in the pilot assembly when used with various gas compositions can play an important role in pilot burner outage at elevated temperatures.

In performing this research, four different sets of experiments were conducted. During one phase, eight unused contemporary pilot burners were installed in an experimental oven at ambient temperatures of 825F for a period of one year. These series of tests were run in cooperation with the Utilization Laboratory of The Peoples Gas Light and Coke Co., Chicago, Illinois.

In other phases, long range studies similar to those of the Chicago tests, were conducted by the A. G. A. Laboratories using a wide variety of materials in common use together with those little

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Gas industry's future in the atomic age

By DR. JOHN R. DUNNING

Columbia University
New York, New York

Our whole industrial civilization in this country is primarily an energy-based technology, of which the natural gas industry is a major factor. Through the use of energy, we have built a whole new type of civilization in this country. We have today 125 to 150 installed horsepower per person. Through the use of coal, gas and oil—the "fossil" fuels—industry supplements every production-line worker with energy equivalent to about 250 workers.

This is the most dynamic, constructive force in our whole economy. Every production figure we look at, whether it be refrigerators, motor cars, telephones or what-have-you, indicates that this country produces more than all the rest of the world combined. In terms of energy, we are not a nation of 160 million people; we are a nation of 11 billion people.

We are perhaps the most favored of all nations in terms of the reserves, per person, available within our continental limits. On the other hand, if we are going to keep our dynamic and growing economy in the face of a steadily increasing population, we simply must find new energy reserves.

We turn to atomic energy as the only feasible solution for future resources. Not too many years ago, so-called experts were saying that we didn't have enough uranium in the world to make an atom-powered economy. Today, through the exploration of the Colorado Plateau area for uranium and the great deposits which are still being found in Canada, we have a benchmark which indicates that our atomic energy reserves are at least 25 times as great as the reserves of coal, oil or natural gas.

Actually, this must be viewed as a preliminary figure, which will be very much increased by new exploration and new developments. It would not surprise me to find out that our atomic energy reserves are a hundred times those of fossil fuels.

Minerals containing uranium go through a number of steps. A pile of uranium the size of an auditorium stage will make uranium metal that one man can carry. In most of our applications today, this metal is further refined by the gaseous diffusion plants at Oak Ridge, Tennessee, Paducah, Kentucky, and Portsmouth, Ohio, scheduled for operation next year.

Historic cube

This method produces basic uranium 235, the separated isotope, at a surprisingly low cost. The result is uranium similar to the historic one-inch cube. This cube of solid uranium, somewhat enriched in U 235, weighs about a pound. It is equivalent to three million pounds of coal or 30 million cubic feet of gas. The consumption of gas in the Cincinnati area is about 300 million cubic feet per day. Ten of these one-inch cubes would supply the entire Cincinnati area for one day.

Naturally, with a fuel of this enormous potential energy per unit, all engineers in our energy industries are thinking about how to utilize it. The first atomic submarine, the Nautilus, has been launched and passed its shake-down cruise with flying colors. Today we have seven or eight atomic powered ships or submarines committed to our budgets. We are, indeed, entering an era of fleet conversion to atomic power in this country.

The first large-scale atomic power plant is now under way in the Pittsburgh area, being built by the Duquesne-Westinghouse group. During the first months of this year, we have seen a number of our major utility groups start firm programs to construct large-scale power plants using atomic energy. The first to put cash on the barrel head has been Consolidated Edison in New York, which has a far-sighted program. Every major industry is in one way or another involved in the atomic energy field today, and most of them are beginning to put real effort in it.

Now where does this leave natural gas? I was amazed to see the rapid entry of many of the oil companies into the uranium field. Many coal companies are very strongly in uranium exploration and production. This is a healthy picture, because it means that our energy industries, instead of being tightly departmented, are beginning to diversify.

We are all in the same game—producing energy and putting it in forms that can ultimately be used by the consumer. When we chart our new explorations, our new production and the rising demand, we know we are going to have an energy deficit. Just as uranium has great advantages in many applications, so gas has great advantages in others.

I cannot believe that the distribution

(Continued on page 51)

Excerpts from an address before the Annual Spring Conference, A. G. A. General Management Section, Cincinnati, Ohio.

Urge coordinated market research functions

By A. G. A. Subcommittee on Marketing Research

Many gas companies actively undertake the basic functions of marketing research at the present time. However, most such companies do not centralize responsibility for these functions in one location within the organization. Accordingly, the benefits derived from marketing research activities are not maximized and its usefulness is inadequately developed.

Centralization of this staff function, permitting the coordinated analysis of a variety of quantitative factors and their effect upon operations, would undoubtedly increase the advantages of marketing research to management, even if budgetary appropriations for such work were to remain unchanged.

Several months ago American Gas Association distributed a questionnaire to all member gas companies serving more than 25,000 customers, asking whether certain specific activities were undertaken and by what group within (or outside) the company, and whether a "marketing research unit," with virtually complete responsibility for such activities (and possibly for other related functions) was in existence.

Returns have been received from 73 companies, representing two-thirds of the customers served by member gas companies. The composite responses of this group should be validly representative of industry practices, to warrant reliable generalizations.

Nearly two-thirds of the companies measure consumer attitudes and opinions, more than three-fourths determine appliance saturations, one-half measure customer appliance preferences and buying expectations, more than two-thirds attempt to evaluate the effectiveness of advertising and sales promotion, and nearly three-fourths obtain dealers sales reports and develop territory sales totals.

On the other hand, less than one-third possess any information concerning the age of appliances, only slightly more than one-third analyze consumer appliance purchase motivations.

The substantial proportion of companies undertaking such analyses is reassuring, indicating general recognition of the importance of marketing research activities as a management tool. It is possible, however, that these percentages may overstate the emphasis accorded to these primary marketing research functions, since no attempt was made to determine the frequency or thoroughness with which such activities were undertaken; questions required only yes or no answers from the respondents.

Much of the available information undoubtedly represents occasional or infrequent analyses by the companies, rather than continuing activities. It should be apparent that studies which have proven useful at some time in recent years may prove even more useful if undertaken regularly.

Much of the information available to the companies is based upon work by an outside advertising agency or independent research organization. Such an approach is particularly appropriate whenever consumer surveys are undertaken which contain questions relating to customer attitudes, opinions, preferences, or motivation. These areas, together with the evaluation of advertising effectiveness, represent the activities in which reliance upon outside organization was most prevalent.

Where activities were undertaken by companies only 14 utilities of 73 indicated that work was centralized in a "marketing research unit." In most instances, these separate units reported to general management executives of the company, rather than to sales personnel, and had additional responsibilities such as rate research and/or general economic research.

However, a few companies have located their centralized marketing research unit within the sales department. Although correlation of the results of their investigations with data obtained from rate research, operations, and economic forecasting may be more difficult in the latter instances, it can apparently be accomplished if other compelling reasons indicate the desirability of such an organizational procedure.

With the current intensified efforts to reverse trends of consumer preference for competitive appliances, close cooperation between marketing research and sales is vitally necessary, and the latter organizational approach may therefore be more justifiable than under normal circumstances.

Among the remaining 59 companies, where responsibility was not centralized, 25 companies assigned major responsibility to varied personnel within one department (usually sales), 19 companies divided major activities among two departments, and 15 companies separated responsibility for principal functions among three or more departments. It is almost a certainty that marketing research cannot be as useful under such circumstances, as when responsibility is centralized.

A complete summary of the percentage of companies undertaking each of the specific activities, with an indication of the extent to which such functions are assigned to various groups, is available upon request from the A. G. A. Bureau of Statistics.

Meter print

● An envelope marked "Meter Reader" awaited a Mystic Valley Gas Co., Mass., employee recently when he called at the home of a family who had been sending the firm dial cards for several months. To the meter reader's surprise, the envelope contained an up-to-date snapshot of the face of the gas meter, taken by the resourceful customer with a Polaroid camera.

Plans set for IGU conference

The Sixth Conference of the International Gas Union will be held at the Hotel New Yorker, New York City, September 25-30, 1955, it has been announced by Robert W. Hendee, president of the Union. Mr. Hendee, who resides in Colorado Springs, was formerly president of the American Gas Association, and was president, Colorado Interstate Gas Company.

Joining Mr. Hendee in announcing the conference were the honorary presidents of the Union, A. Baril of Paris, H. Müller of Munich, and M. Brabant, Brussels.

The International Gas Union is comprised of representatives of national gas associations of 17 countries. These are: U. S., Austria, Germany, Belgium, France, Italy, Canada, Denmark, Saar, Norway, Spain, Switzerland, Sweden, England, Japan, Australia and Netherlands. It is expected that delegates from each of these nations will visit the U. S. for the conference.

All members of the gas utility and pipeline industry as well as gas appliance manufacturers are invited to participate. Registration fees for U. S. gas men will be $25. The conference will be open to all members of the gas industry from abroad without charge.

Printed sets of all papers to be presented during the three meeting days of the conference will be available at A. G. A. headquarters in New York before the conference opens at a cost of $20 per set. Individual papers will not be available separately.

A Committee on Arrangements, headed by E. W. Doebler, president, Long Island Lighting Co., has arranged an excellent program, which includes parallel entertainment features for the ladies.

Other members of the arrangements committee are: George S. Young, president, The Columbia Gas System, Inc., New York; Davis M. DeBard, vice-president, Stone & Webster Service Corp., New York; Charles E. Bennett, former president of A. G. A., and Manufacturers Light & Heat Co., Pittsburgh; Walter S. Byrne, president, Seattle Gas Co., Seattle, Wash.; A. W. Conover, president, Equitable Gas Co., Pittsburgh; H. C. Forbes, executive vice-president, Consolidated Edison Co. of New York; Alexander Forward, former managing director, A. G. A., New York; N. Henry Gellert, former president, Seattle Gas Company; also, Frederic O. Hess, president, Selas Corporation of America, Philadelphia; F. X. Mettenet, vice-president, The Peoples Gas Light & Coke Co., Chicago; J. H. Moore, chairman, Moore Publishing Co., New York; Clifford E. Paige, former President, The Brooklyn Union Gas Co.; M. H. Parkinson, executive vice-president, The United Gas Improvement Co., Philadelphia; W. F. Rockwell, Jr., president, Rockwell Manufacturing Co., Pittsburgh, and C. A. Schlegel, vice-president, United Engineers and Constructors, Inc., Philadelphia.

Bruce A. McCandless, A. G. A., is serving as secretary of the committee, which posthumously includes Edward J. Tucker, vice-president, The Consumers' Gas Company of Toronto, who died recently.

E. W. Doebler, Long Island Lighting Co. heads arrangements group for international conclave

R. W. Hendee, IGU president and former A.G.A. president, will open conference in New York

The Conference will open informally on Sunday, September 25, with a reception for the delegates. Monday's program includes a boat trip around Manhattan Island, a meeting of the International Gas Union Council, and a dinner for Council members.

On Tuesday formal greetings will be extended to delegates from officials, including F. M. Banks, president, A. G. A., and R. H. Touwaide, Brussels, general secretary of the Union. E. Carl Sorby, vice-president, George D. Roper Corp., Rockford, Ill., will deliver the opening address. Separate meetings will be devoted to transmission and distribution and to gas production, with a reception in the evening.

Utilization and gas production will be topics for sessions on Wednesday, with a luncheon sponsored by Consolidated Edison Company. A visit to The

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PAR research groups seek readers' suggestions

a PAR activity

PAR Research is now in its tenth year. Ten years ago the gas industry was at the end of a most demanding national situation—World War II. At that time, except in the natural gas areas, the manufacture of coke oven and carbureted water gas was almost traditional. Increased and rising material and labor costs made the ensuing change to natural gas inevitable in many manufacturing areas and thus natural gas became the primary fuel of the industry, more than doubling its use.

Prior to the end of the war farsighted industry leaders, anticipating approaching problems of readjustment, had formed a Postwar Planning Committee. Today's PAR Program is a fruit of their effort.

Those first efforts have grown into a well organized research function whose aim is the upgrading of all technical aspects of the industry. Utilization research, domestic as well as industrial and commercial and natural gas research —our oldest continuous research function—were greatly increased; manufactured gas production research was initiated.

The several research branches were fitted into an over-all coordinated program responsive to the needs of the industry. In only ten years this industry has developed a research function that is recognized as outstanding and an example for other industries.

This research has produced over 125 publications. A booklet representing a short summary of each report, bulletin or publication will be available later this year. Under current plans additions to this ten-year listing will be made at regular intervals, probably every two years.

These publications paint a broad picture of the technical aspects of the gas industry, from fact-finding to how-to-do-it; from erudite fundamentals to the very practical.

In the past ten years of PAR research, definite and valuable advances have been made in all technical fields. The advances have resulted in improved competitive and economic positions. Furthermore, stimulated by the PAR Program, manufacturers of appliances and equipment have increased their own research—an important dividend for the benefit of the industry.

All of these advances and studies have been conducted on projects which the gas industry wants and needs. This is true because proposals for research projects come from the gas industry itself.

The research committees would like this procedure continued and strengthened and they earnestly solicit the reader's cooperation in this matter. The outline of a "Suggestion for Research" form is shown below.

In order to be most useful, completed suggestions should be in as soon as possible, preferably before Aug. 30, 1955.

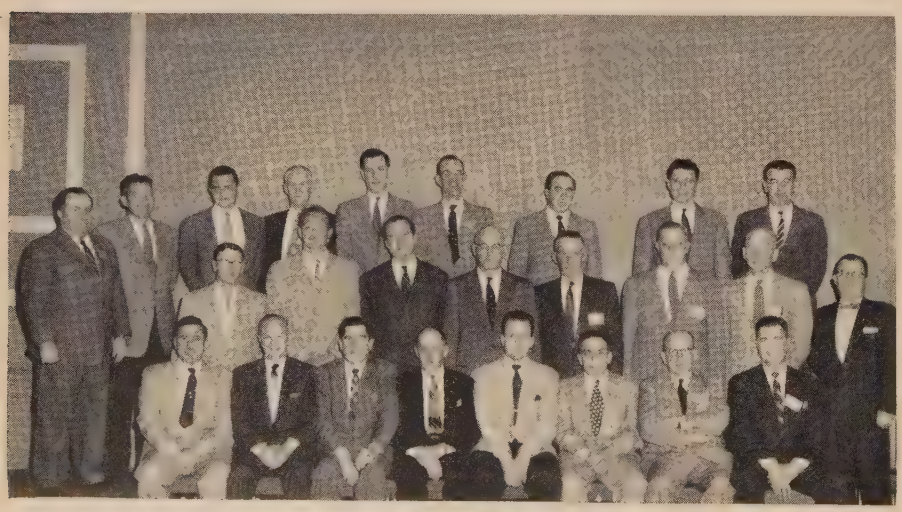
Date Proposed project no.

1. Suggested research project:
2. Suggestion made by:
   a. Purpose and objectives of suggested research project:
3. Anticipated benefits to the industry:
4. History of subject and present status:
5. Sources of further information of this subject:
6. Use expected to be made of results of this research and by whom:

A.G.A. accident prevention course draws favorable comment

ACCIDENT PREVENTION through Informed Supervision" has now been conducted in six parts of the country: Amarillo, Texas; Wichita, Kansas; Fort Dodge, Iowa; Pittsburgh, Pennsylvania; Rockford, Illinois; and New York City. Approximately 220 superintendents, supervisors, foremen and safety directors from 26 utility and transmission companies have attended the course, and 16 Accident Prevention Committee members have participated as instructors.

A major reason for the course is that although the gas industry accident frequency rate has been improving steadily in post-war years, the gas industry stands far below average among 40 industries which report to the National Safety Council. Each two-day course is limited to 25-35 students, and registration costs $20, which includes the cost of a personal folder of safety material plus two luncheons.



"Accident Prevention through Informed Supervision," a two-day course designed by the A. G. A. Accident Prevention Committee, was offered for the sixth time at New York's Hotel Statler. Twenty-four men from six utilities in the greater New York area attended. Instructors, shown standing, are: R. N. Papich (far left), American Gas Association; A. S. Hancock (second from left), Long Island Lighting Co.; V. A. Howell (far right), Long Island Lighting Co.; A. L. Dowden (absent from photo), Liberty Mutual

The customary evaluations following the presentation of each course continue to be complimentary. Even better are the unsolicited comments made during luncheons, coffee breaks and at the closing session, such as this statement by F. X. Phelan, safety supervisor, Central Illinois Electric & Gas Co., Rockford, Illinois. "In the many years I have been identified with safety work I never attended a conference where there was such a high concentration of truly worth-while material given in one package. One can take home much useful and valuable data to further augment a safety program."

Or this quote from J. G. Lambert, safety supervisor, Northern Illinois Gas Co., Bellwood, Illinois. "I have attended several safety courses, but this was by far the best organized and planned, and it has much really useful material."

Samuel W. H. Gibson of The Peoples Gas Light & Coke Co., Chicago, said, "I enjoyed the course very much, first because there was

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Acker an 'expert' at workshop

E. R. Acker (seated), Central Hudson Gas and Electric, is introduced by Prof. Robert T. Livingston at Columbia's Utility Management Workshop held for two weeks at famed Arden House

After relating experiences of his company in setting up executive development program, Mr. Acker (head of table) conferred with small groups of workshop students for informal discussions. At Mr. Acker's left is Central Hudson's A. L. Colligan

How an executive development program was established at Central Hudson Gas and Electric Corporation was reviewed by the company president, Ernest R. Acker, on May 19 at Columbia University's Utility Management Workshop, held for two weeks at Arden House, Harriman, New York.

Mr. Acker's presentation and subsequent afternoon and evening discussions with 28 workshop participants from utilities all over the country constituted a typical day at this unique course in executive training conducted under the direction of Professor Robert Teviot Livingston. Sponsored by Columbia's Department of Industrial and Management Engineering, the sessions from May 16 to May 27 marked the fourth annual workshop devoted to the problems of developing executive leadership in the utility and public service industries.

Mr. Acker was one of nine "experts" invited by Professor Livingston to act as a consultant for a day at the workshop. As in past years, the speakers were selected with regard to their varied backgrounds and their presentations reflected varied points of view. Represented were business men, college professors, an editor, and consultants in the field of management and human relations.

Their choice reflects one of the means by which Professor Livingston seeks to achieve the primary aim of the workshop —to make its "graduates" continue to think (as they find they do while they are participants) about management problems in a manner that may differ widely from the individual's previous point of view.

Three groups

The guest experts' presentations are tied in with intensive work pursued by the course students. The participants are divided into three groups, each with its own group leader and staff advisor. The resources of the entire workshop staff, and of the guest consultants, are available for the groups to use in their work.

Within the broad subject selected as the framework of the workshop—this year it was "Executive Development and Human Relations"—each of the three groups selects and proceeds to develop some aspect of the main subject, reporting its findings and conclusions at the end of the two-week workshop. This year, five questions were posed and studied:

1. Why is it desirable to develop people?
2. Can you develop people?
3. If so: what do you expect to get, what do you actually get, and what does it cost?
4. Supposing you do not have a methodical training program . . . so what?
5. How do you develop people?

"The results will not be the solution of some great problem in human relations," Professor Livingston said. "But if I and my staff have done our job, these men will be aware of problems they in all likelihood did not know existed. And with that awareness, they will be on the way to overcoming such problems in their companies at home."

Mr. Acker brought before the group

(Continued on page 38)

A. T. GARDNER, *CHAIRMAN* · R. E. EBERLE, *VICE-CHAIRMAN*

How Niagara Mohawk's modernized telephone service keeps customers happy even in time of crisis

Stored calls ease 'phone flood

By JOHN A. WILLIAMS

Manager, Methods and Statistical Dept., Niagara Mohawk Corporation

Customers come to you in person and it's one thing—the tempo is rather leisurely, and a wait of a few minutes means nothing. But let one come to you by telephone and it's different!

Whether a customer wants a railroad reservation to Chicago, wants immediate delivery of her Easter bonnet, wants to say that his furnace is cold, that his lights are out or that her kitchen range won't work—if it's by telephone they want service and now.

How do public service companies handle such problems? Obviously the answer is to have enough telephones and enough people on duty to answer all calls, and to do the necessary field work. This interposes some serious problems however during storms and during other periods of stress, and I don't think that any company has ever been able to solve it in such a simple, although expensive, manner.

Early in 1952 our company set out to find the best possible solution to such a problem for our Syracuse office. The Syracuse office serves a population of about 360,000 people with about 107,000 electric customers and about 85,000 gas customers, of whom about 42,000 use gas for space heating.

We had a ten position lamp and key order table, as is shown in the photograph. Twenty-two lines came into this board, eight from the telephone company's central office, eight from the PBX board and six from other sources, but only ten customers could get attention at one time. Each of the ten operators (or fewer, as was quite often the case) had 22 lights in front of her that she could answer.

When storms or real cold weather came upon us and the lights twinkled and the board became swamped with calls, it was a pure matter of chance as to whether the most recent call or the one longest on the board would get attention, and the waiting time for many customers became interminable. The customer complaints at such times were so serious that some solution had to be found.

In our studies we found that several utilities (notably the Peoples Gas Light and Coke Company of Chicago and the Brooklyn Union Gas Company) had developed individual desks for operators to get away from the congestion and the cross-talk of the order tables, and that they and others had installed boards for storing calls and for assigning them in chronological order to the respective operators. These were major improvements over the old lamp and key order table type of board which we were then using.

We soon placed an order with the New York Telephone Company for a telephone system to be installed on individual desks with storage facilities and with provision for assigning calls to operators in rotation according to priority of original calls. At the same time we asked them to proceed with the development of a device which would give our customers an automatic and courteous answer when the operators on duty at any one time couldn't take care of all of the incoming calls.

Automatic answering device at Niagara Mohawk co telephone for dictating messages to moving magn belts in control units. Unit at left carries standar sage, while one at right carries emergency m

Their answer was: "Let's install what we have available and at the same time let us work on the answering device." Such an answer seemed quite acceptable, so the initial installation was made on April 1, 1953, with 15 individual desks as is shown in the second photograph and with 20 trunks to the central office.

Under the new arrangement each customer service representative has a desk all of her own where she can store her personal effects, where she is not crowded and where she is not bothered

Lamp and key board illustrated above caused customer complaints regarding telephone service, because of congested lines, noise of cross-talk

New system operates more smoothly, as each call is assigned in rotation, according to priority. Operators have individual desks in roomy area

by cross-talk of other representatives.

A representative now has no decision to make as to which call she will take as the calls are allocated automatically in strict order of priority. The first call in goes to the first representative who isn't busy and so forth and so on. The customer service telephone center has a separate telephone number so that service calls are received direct from the Telephone Company's central exchanges, rather than being routed through the company's private branch exchange. A special telephone listing for four categories of customer service calls is of great help in directing the incoming calls to the proper telephone number.

The before and after pictures present contrasts that are quite striking but the most striking of all was the automatic answering device. The New York Telephone Company designed and installed the automatic answering device early in 1954, about a year after the original installation had been made.

The device is an adaptation of one which had been in use for a number of years for doctors and others who had to have calls answered somehow or other. This one, however, is different and much more complicated in that it has to fit into a 6A telephone switchboard that stores calls and that then assigns them in chronological order to the first available operators.

A photograph shows the external instruments that more or less control the device. The special telephone instrument shown is used in dictating messages to moving magnetized belts in control units #1 or #2, either of which may be used at will. The standard message is carried in control unit #1. This message at the moment says, "Niagara Mohawk—We are sorry our representatives are busy. Will you please hold the line. This is a recording. Thank you."

The other unit is used for emergency messages such as "Niagara Mohawk—Our representatives are busy. We are having a serious storm and general trouble. Service will be restored as fast as is possible. A representative will take your call if you will hold the line. This is a recording. Thank you." Many times, during emergencies, such a message serves to satisfy the customer who will then hang up, thus making the line available for other customers.

Relay requests

The wiring and the multitudinous relays and control panels required to handle the answering device are somewhat reminiscent of an inside view of a large electronic data processing machine or other electronic device so prominent in the public mind today.

Orders are received at the desks for turn-ons or turn-offs, electric or gas meter sets or removes, gas leaks, no lights, adjust appliances, wires down and all other kinds of trouble. They are written on a "service request" form which is then placed on a "Lamson" high speed belt conveyor to the right of the representatives' desks. This belt delivers the order to the dispatchers' desks within seconds.

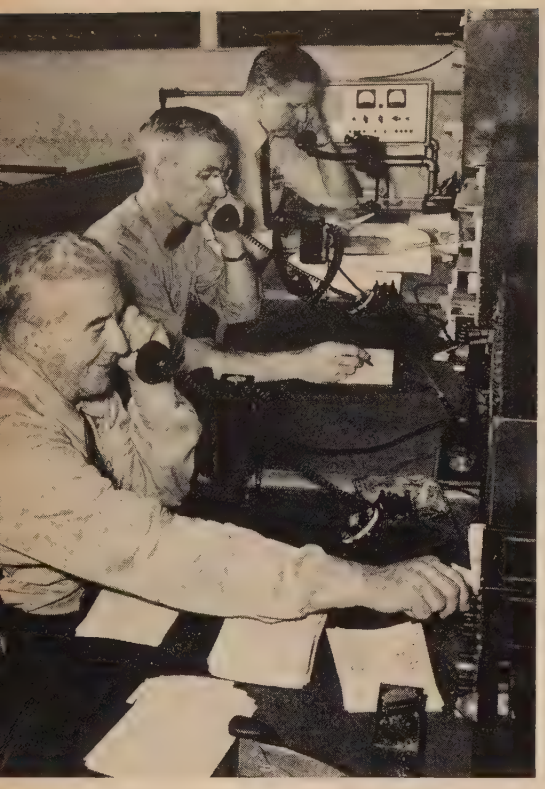
If the order is an emergency order, it is dispatched to the workers in the field by short wave radio and the job of restoring service is then under way, many times within a few minutes after the call was placed.

Our standard of good performance is to answer all calls received in the telephone center within 20 seconds. If the incoming call is not answered within that time, the answering machine cuts in and delivers the "message." The first customer who waits more than 20 seconds for an answer is given the message. As soon as the message is completed the customer's call is placed in the storage unit for assignment to the next available representative. The message is then repeated simultaneously to all customers whose calls came in while the first message was being given and their calls are then placed in the storage unit, and so forth and so on.

So much for the mechanics of the device. How has it worked out in actual use?

The calendar year of 1954 was really a tough year to try out such a device in Syracuse. Up to October 1, Syracuse had had five serious wind storms which blew down lines all over the territory and put severe loads on the customer service board, all of which were handled with reasonable dispatch and promptness.

Then in October along came "Hazel." What "Hazel" did to the Syracuse distribution lines beggars description. The demands on the customer service board could not have been met with ten times the existing facilities but somehow the answering device did its share, the



Messages received at telephone operators' desks are written on service request forms, and sent to dispatchers (pictured above) by means of Lamson high speed belt conveyor

people were convinced that the company was doing its best and service was finally restored.

What was the public's reaction to an experience of this kind? We can't quite tell ourselves but one of the Syracuse newspapers wrote a story about our performance during one of the season's bad storms. The answering device got a big hand along with the magnificent performance of the operating department.

The answering device unquestionably does a job during storms and at the time of the first cold snap of the season, when it seems that everybody and his brother wants his gas furnace turned on. What does it do, however, when things are more or less normal?

Our records give a picture of what happened under both sets of circumstances, i.e., the four weeks ending November 13, 1954, a period which started with the clean-up on "Hazel" and the four weeks ending April 30, 1955 which represented a period of relative calm in the telephone center.

Hurricane "Hazel" struck Syracuse Friday night October 15th and the records for Monday and Tuesday, October 18th and 19th show that up to five times the normal number of telephone calls were received during the aftermath of the storm. The records show that there were also strenuous days later in the month, partly caused by the clean-up of "Hazel," cold weather, and other storms, and partly caused by increased absences and reduced efficiency of personnel, as people just cannot stand up under the increased tension and overtime caused by such an experience.

The records for the four weeks ending April 30, 1955 reflect a period of relative quiet in our customer service telephone center as is shown by the low percentage of calls answered day by day by the answering device. Even so, 783 of our customers or 5.9 percent received a message that month at about the time that they would have begun to become impatient.

Careful studies have been made and are being made to put more representatives on duty at critical hours and to shift representatives between hours. We are convinced, however, that you can never have enough people on duty to answer all calls that may come in at any one time. The answering device helps to fill this gap and also to furnish figures to plan the most efficient manning of a customer service telephone center.

We are sure that the answering device was of immeasurable assistance to us in handling "Hazel" and other emergencies during 1954. We are also sure that the greatly improved record in April 1955 is due, to a considerable extent, to the utilization of the facts and figures produced as a by-product of the new equipment.

Current sales increase spurs Old Stove Round-Up campaign

a PAR activity

WITH gas range sales on the rise during the first five months of this year, an increase of 12.1 percent over the same period last year, the gas industry looks with optimisim to its forthcoming Old Stove Round-Up campaign.

A PAR activity of the American Gas Association with the cooperation of the Gas Appliance Manufacturers Association, the campaign will run for three months, September through November. It has been extended an additional month this year in order that dealers may take full advantage of the peak season for selling home appliances.

In preparation for the seventh annual campaign, A. G. A. recently sent out an advance portfolio to utility companies, dealers, and gas range manufacturers across the nation, outlining plans for the biggest Round-Up in its history.

Local and national promotions will be built around the advance portfolio, which contains information on point of sale displays, television and radio commercials, outdoor posters, advertising mats, giveaway premiums, and similar promotional aids, accenting the western theme which has proved so successful in corraling customers into dealers' showrooms in past campaigns. The kits may be obtained by writing to the Promotion Bureau, A. G. A. Headquarters.

Every available medium will be used in full support of the Old Stove Round-Up, before and during the campaign. Four-color single and double page spreads in *Better Homes and Gardens, American Home, Ladies' Home Journal, McCall's,* and *Woman's Home Companion,* will be supplemented by extensive advertising in newspapers and trade journals.

Television will be used to an even greater extent this year with the accent on glamor, featuring Ramona Deitemeyer, the gas industry's Mrs. America of 1956. The nation's most publicized housewife will be seen in an attractive kitchen setting, delivering a series of gas range commercials, running from 20 seconds to one minute.

Radio coverage will also be increased with a series of nine singing commercials. A two-sided 12" record provides four one-minute, three 20-second, three 30-second, and two 20-second spots, with time allowed for individual dealer identification.

Order for outdoor posters are up 150 percent over last year, another indication of intensified interest in this year's Round-Up. Giant animated window and floor displays will feature the nation's number one box office attraction, cowboy actor John Wayne.

Caloric, Cribben & Sexton, Hardwick, Magic Chef, Maytag, Roper, and Tappan, seven of the nation's leading gas range manufacturers, will use the John Wayne displays to stress their individual selling points, while the utilities will stress the superior advantages of cooking with gas—cooler, cleaner, quicker.

To educate the public to the rapid strides made in the modernization of today's gas ranges, manufacturers will emphasize such features as automatic timers, streamlined styling, built-in units, dramatic color, and the availability of many models incorporating rotisseries, griddles, deep fat fryers, and deep well cookers, right in the appliance.

Utilities will put emphasis on the fact that gas offers economy, efficiency, instantaneous ignition, and dependable performance.

Sell gas as a service, not a fuel

By J. THEODORE WOLFE

Executive Vice-President, Baltimore Gas and Electric Company

Excerpts from an address before the A. G. A. Sales Conference on Industrial and Commercial Gas, Boston, Mass., April 12-14, 1955.

Before we discuss the part of the Industrial and Commercial Gas Section in the Gas Industry Development Program, let's see if we know what the program is, and why it is. Most of you are acquainted with it to some extent and have at least read the formal statement of principles which bears the endorsement of A. G. A.'s Board of Directors.

There are 15 of these principles, dealing with sales, promotion and service. They are about as controversial as a dish of ice cream. In fact, they are so obviously the principles on which all of us should and many of us do conduct our businesses that they have been sneered at in some quarters, referred to as "the program of pious platitudes" or "the 15 fatuous fancies." Just as any set of principles might be sneered at by one who gives them lip service only.

But the Giddyap Program, as its nickname implies, is really a program of action. Its objective is to develop to the fullest possible extent the long term competitive potential of the gas industry. Its approach is varied:

It seeks to upgrade the quality of gas equipment and appliances.

It seeks to stimulate more intensive sales and promotional efforts on the part of gas utility companies, appliance manufacturers, and dealers.

It seeks to develop and maintain a better understanding of the industry and its problems and opportunities, and a greater degree of cooperation between utility companies and manufacturers in the solution of those problems and the acceptance of those opportunities.

Viewing the tremendous growth in sales during the past decade or two, Why bother about the competitive potential of the gas industry? In many parts of the country, it has been necessary to turn business away or to set up waiting lists of those desiring gas service. Why bother about selling gas?

The Giddyap Program is a long term project; and, from a long term point of view, we do need to bother about selling gas. The boom in gas sales during the past decade has been largely due to the strange circumstance that gas, in a great many areas, has been the cheapest source of heat energy available. As an almost automatic consequence, sales of gas for the sole purpose of making heat, whether in the home, the store, or the factory, have sky rocketed.

This may seem fine at first glance, but there are some serious long term hazards in the situation, the most serious being that the enjoyment of a price differential under other fuels may dull the salesmanship of the gas industry. Then, when the law of supply and demand brings us to account, as it ultimately must, whether or not the Federal Power Commission regulates the producers of gas, and gas loses its controlling price advantage, we may not have the salesmanship needed to survive the competitive struggle.

We have seen evidence already that this hazard is not just imagined. In applications where gas is sold competitively for purposes other than simply to make heat, we have been losing some ground. This is certainly true with respect to the domestic cooking load, and I am sure that some of you, at least, will say that it is true with respect to industrial and commercial applications of gas.

Our greatest need, it seems to me, is to revive the concept of gas, not as a fuel, but as a public utility service. We need to sell it on the basis of what it will do, not simply what it will cost. In order to do this, we need to make available gas consuming equipment which will give the customer not only a prescribed number of heat units but the maximum degree of convenience, cleanliness, coolness and control.

We need such equipment, not just for the home, but for the store, the bakery, the restaurant, the factory, for any place that gas may be used. We need to do everything within our power to overcome the impression—too often justified by our failure to demonstrate otherwise—that gas is old-fashioned, inadequate or unreliable. In this, the members of the Industrial and Commercial Gas Section have just as great a responsibility as anyone else.

Your chairman, Ray Trowbridge, recently sent a "request for help" to the men in charge of industrial and commercial gas sales. He called attention to the fact that "obsolete gas equipment is being used to instruct students in many colleges giving engineering degrees or courses on hotel or restaurant management. This equipment exists side-by-side, in many cases, with modern electrical equipment and the comparison is unfavorable." He might have said "odious."

In this same letter he reported that a recent survey of schools and colleges using commercial cooking equipment in their courses disclosed that, while most

of them were using gas, much of the equipment was old and in need of replacement. He made the obvious but urgent plea that gas utility representatives get busy with these schools and colleges, sell them on *modern* gas equipment, help them get it on favorable terms, and assist them by various means in the instruction of their students. Here is an excellent and specific opportunity for members of this Section to share in the long term effort to sell gas as a modern and convenient service, not just a fuel.

Countless other opportunities must be available to those who are on the alert for them. In restaurants, in hotels, in apartment houses, as well as in the homes of our customers, obsolete gas-consuming appliances give forceful evidence to support the adverse claim that gas is old-fashioned and inconvenient.

We know that the claim is basically false, but if we want our present and prospective customers to know it, we must work to improve our service and the means of using it, and we must bring home, even to existing customers who seem perfectly satisfied with the gas-consuming equipment they bought 20 years ago, the fact that the gas appliances of 1955 are completely modern.

Turning again to the situation created by the gas industry's enjoyment of a price differential, I should like to say a few words about one aspect of that situation, or one of the unfortunate consequences of it, which must have impressed itself upon members of this Section as it has upon me. That is the attitude of many gas utility companies and regulatory bodies towards the sale of industrial gas.

Here more than anywhere else, we have seen an alarming tendency to think of gas strictly as a source of heat, and not as a utility service. With industrial rates in some areas so low as to make gas the cheapest source of heat on a straight Btu comparison, even without considering such factors as efficiency and controllability, it has been easy to sell gas on a take-it-or-leave-it basis. As a matter of state law in some instances, *all* sales of gas for industrial uses are subject to interruption as required to protect the domestic consumer. To my mind, this is a tragic condition.

We must recognize, of course, that there are many uses of gas in industry, often large volume uses, where the price per million Btu contained in the fuel is the only factor which determines the customer's selection. For such uses, gas may quite properly be sold on an interruptible basis provided it can be made available at rates low enough to warrant the customer's making an investment in alternate fuel-burning equipment and suffering the headaches that go with switching from one fuel to another.

But there are other uses where continuity of supply is essential. For these uses, gas can be sold only on a firm basis, and it is one of the sad consequences of the take-it-or-leave-it attitude of recent years that many profitable industrial loads have been lost by the gas industry to competitive services. Gas utility companies and manufacturers of gas equipment have suffered alike from these losses.

I am a strong believer in the sale of firm industrial gas, not at rates which will make it an obvious bargain as a fuel, but at rates which will recognize its value as a service. It is in the sale of such gas at prices well above the prices of competitive fuels that the members of our own industrial fuel department, now under the able direction of your vice-chairman, Larry Biemiller, have earned my admiration.

I get a thrill when reports come to me that these men have sold 38,000 cubic feet of gas per hour, worth $200,000 a year, for the generation of atmosphere used in the annealing of steel, and have sold it at a price per million Btu just

(Continued on page 55)

Committees at work

Increased demand for hot water, as a result of increase in light-colored cars, interests utility men at mid-season meeting of Commercial Processing Committee in Boston

Two major topics at Boston's Spring Conference Food Service Equipment Committee meeting were strengthening distribution of Cooking for Profit, pre-mix baking demonstrations

Attract operating men to New York for annual Chemical, Engineering and Manufactured Gas Production Conference

Study peak shaving, standby

More than 500 delegates attended the Chemical, Engineering and Manufactured Gas Production Conference sponsored by the Operating Section of the American Gas Association at the Hotel New Yorker, New York City, on May 23, 24 and 25.

While many plans and problems were reviewed, the great importance of manufactured gas as a standby measure and as a means of shaving peak loads received much attention on the three-day program.

S. W. Horsfield, Long Island Lighting Co., delivered the welcoming address as chairman of the A.G.A. Manufactured Gas Committee. He introduced Walter H. Davidson, Transcontinental Gas Pipe Line Corp., current chairman of the A.G.A. Operating Section, who briefly reviewed the aims and objectives of the Section and emphasized the importance of the Section's activities, particularly since the Natural Gas and Manufactured Gas Department of A.G.A. had been abolished. Most of the technical activities of both departments have been absorbed by the Operating Section.

The theme of the conference was established by Edward G. Boyer, Philadelphia Electric Co., in an excellent study and report titled: "The Manufactured Gas Position in Present Day Operation." Mr. Boyer explored today's operations of the gas industry, covering the natural gas situation, its availability, growth, types of contracts and off-peak sales.

He also reviewed the manufactured gas situation, discussing the general aspects of manufactured gas production, and applications of manufactured gas in operations from the standpoint of peak loads and modification of base gas.

In conclusion, Mr. Boyer said it appeared uneconomic, in general, to meet maximum sendouts, which might occur on only a few days, by purchasing natural gas on long term contract. For such cases it is cheaper to make gas from other fuels on existing equipment, or on new equipment purchased for that purpose. He said it would seem unwise to retire existing gas production equipment that is in operating condition. He declared that manufactured gas has a very important position in present day operation, and will become more and more important in the future as an aid in meeting the gas load.

Over 500 utility men attended the Chemical, Engineering and Manufactured Gas Production Conference in New York. Many avoided the rush shown above by registering in advance

T. L. Robey, coordinator of research, A.G.A., discussed this vital gas industry function. The PAR Research program is now in its tenth year and today is recognized as an outstanding example for other industries. More than 160 projects, covering all phases of gas industry research have been undertaken in the past ten years. Nearly 75 percent of these have been concluded, and about 25 percent are being continued.

Such projects included research on utilization, including burner and pilot design, appliance improvement, and installation information. Natural gas research projects included testing information to aid producers, better design information for pipeliners, new instrumentation for processers, and investigation of underground storage.

In manufactured gas, projects covered new processes, new methods for peak load and base production to meet problems of changing load structure. Information on coal and oil fuels, new information on catalysts, problems on inter-

changeability and instrumentation and control, also have been studied in aid of the manufactured gas producer. Mr. Robey discussed many of the future projects, including work being done in the gas incineration and air conditioning fields.

Frank A. Boyd told delegates of some of the experiences encountered by Texas Eastern Transmission Corporation in operating a storage service from the Oakford storage pool in Pennsylvania to the eastern seaboard market.

Karl B. Nagler, The Peoples Gas Light and Coke Co., discussed safety from the operating man's viewpoint. Safety in the gas industry comprises safe design, safe construction, safe maintenance and safe operation of all gas industry facilities, he stated.

He described briefly the highlights of two important codes recently completed. The American Standards Association Code for Pressure Piping (B31.1) establishes safe practices and specifications for construction and installation of transmission and distribution piping systems. A new method of recording and measuring work injury experience, ASA Standard Z16.1, is being adopted by many companies. The A. G. A. Executive Committee is urging all companies in the industry to adopt the new standard.

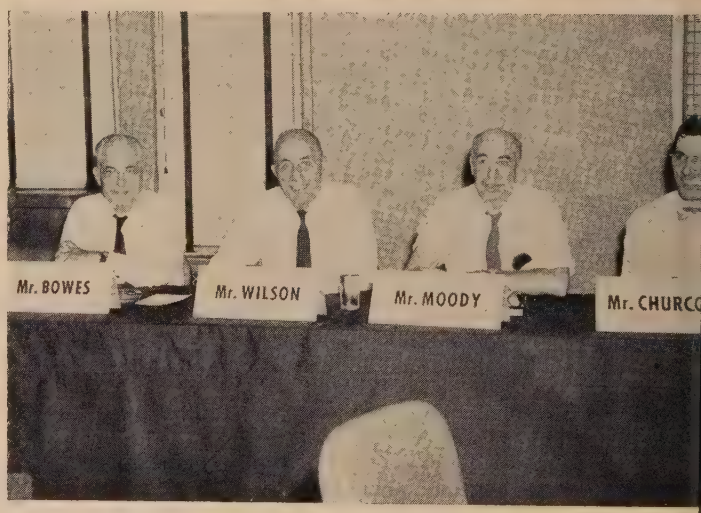
J. G. Voelker, Central Hudson Gas and Electric Co., related the experiences of his company in operating a standby oil plant during an emergency period. For more than 30 hours an emergency substitution of 100 percent high Btu oil gas was made for natural gas in an area serving about 10,000 meters. The substitution of oil gas for natural gas was necessitated when an eight-inch high pressure line under tidewater became severed.

The remainder of the three-day conference was given over to separate sessions conducted by the Chemical and Engineering and the Manufactured Gas Production committees. Luncheon conferences were held each day under sponsorship of the various subcommittees.

Monday noon luncheon conferences were devoted to Carbonization and Coke, with H. E. Taylor, Alan Wood Steel Co., and E. W. Montgomery, Connecticut Coke Co., as chairmen. Concurrently a luncheon conference featuring a symposium on peak shaving practices and problems was conducted under the leadership of Louis Shnidman, Rochester

Gas Production Subcommittee sponsored panel on peak shaving, conducted by L. Shnidman

W. J. Thiel (r.) headed conference devoted to symposium on high Btu oil gas practices



W. E. Churchill (r.) headed group discussing chemical cleaning, and use of radioisotopes

H. E. Taylor (seated, center) was chairman of Carbonization and Coke luncheon conference

IGT's E. S. Pettyjohn stands at microphone to speak at session on pipeline gas from coal

Use and handling of liquefied petroleum gases was main topic at pictured luncheon session

Charles Koons addresses plant waste disposal session; 3 men prepare to answer questions

Men shown spoke on low Btu gas problems and practices, Hasche unit installation, safety

Gas and Electric Corp., and J. L. Oberseider, Southern California Gas Company.

In an afternoon session, Dr. Oscar W. Lusby, Baltimore Gas and Electric Co., and L. M. Van der Pyle, Rockwell Manufacturing Co., led a forum on quality control and gas conditioning.

I. B. Dick, Consolidated Edison Company of New York, who is the chairman of the A. G. A. Chemical and Engineering Committee, presided at a session Tuesday morning devoted to chemical and engineering topics. Reports and papers on suspensoids, analytical instrumentation, use of radioisotopes and the production of petrochemicals from natural gas were given. Speakers included Charles B. Moore, Arthur D. Little, Inc., and Duane V. Kniebes, J. M. Reid, H. R. Linden and E. S. Pettyjohn, Institute of Gas Technology.

S. W. Horsfield presided at a Manufactured Gas Production session on Tuesday morning. A luncheon conference was devoted to low Btu gas on Tuesday with G. L. Calderwood, Rochester Gas and Electric Corp., and F. L. Corcoran, Boston Consolidated Gas, presiding. W. A. Lamberton, Philadelphia Gas Works, talked on safety training and L. Albert, Koppers Co., discussed the operation of the Hasche furnace. C. B. Glover, United Engineers and Constructors, Inc., spoke on the advantages of the cyclic catalytic reforming process.

Bernard J. Clarke, Columbia Gas System Service Corp., served as chairman for a luncheon conference on pipeline gas from coal. E. S. Pettyjohn, Institute of Gas Technology, discussed costs of pipeline gas from coal under the suspended phase gasification process. Other papers were given by H. R. Linden, I. G. T., Murray Greyson, Bureau of Mines, M. M. Waller, Baker and Company, Paul R. Grossman, The Babcock and Wilcox Co., and C. J. Lyons and H. R. Batchelder, Battelle Memorial Institute.

At a luncheon conference on radioisotopes and chemical cleaning, a paper prepared by W. D. Crandall, Consolidated Edison Co., was read by the luncheon conference chairman Warren E. Churchill, Boston Consolidated Gas Co., when Mr. Crandall was prevented by illness from attending the meeting. Dr. A. H. Moody, Consolidated Edison Co. discussed some of the problems encountered by his company in chemical

(Continued on page 51)

Manufactured Gas Production Committee completes plans for the three-day conference, and plans next year's activities. Chairman S. W. Horsfield, Vice-Chairman J. L. Turnan, are seated at center

Committees meet

Committee meetings held in conjunction with Operating Section conferences enable members to attend two functions in minimum time. In addition to the three meetings pictured here, the Chemical, Engineering and Manufactured Gas Production Conference featured meetings of the Section's Executive Committee, Convention Program Committee, and Subcommittee on Odorization of Gas.

Chairman I. B. Dick and Vice-Chairman S. Cohen sit at head of table at Chemical and Engineering Committee meeting. D. L. White (seated, l.) becomes vice-chairman in October

One of six committee meetings conducted with Chemical, Engineering and ufactured Gas Production Conference is Managing Committee business me

Operating oldtimers

Five Operating Section elder statesmen attended the conference. Former section secretary A. G. King is at left, and former section chairmen are seated on sofa (l. to r.): F. J. Pfluke, Rochester Gas and Electric; C. W. Wilson, Baltimore Gas and Electric; H. B. Anderson, retired from Philadelphia Gas Works Division, UGI; and R. Van Vliet, retired from New York and Richmond Gas

Present wide-ranging discussions at annual New York-New Jersey Regional Gas Sales Conference

NY-NJ sessions draw record crowd

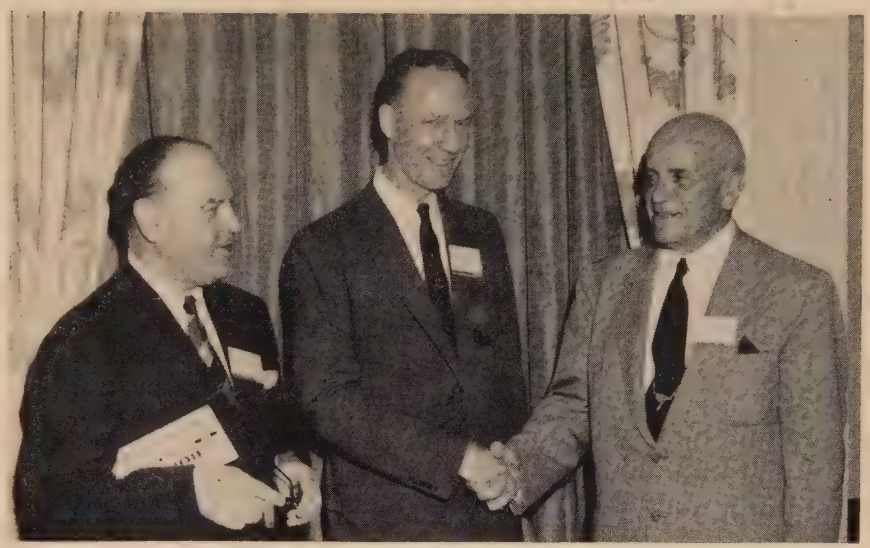
How public relations and marketing statistics can help move gas appliances off the salesfloor were two of a wide range of subjects discussed at the New York-New Jersey Regional Gas Sales Conference at the Hotel Commodore, New York, May 23-24.

Innovations at the annual event, sponsored by American Gas Association Residential Gas Section, included round-table discussions that have proved popular at similar meetings in Pittsburgh and Chicago. A record attendance of 223 persons was announced by Henry Rohrs, Elizabethtown Consolidated Gas Co., out-going Council chairman.

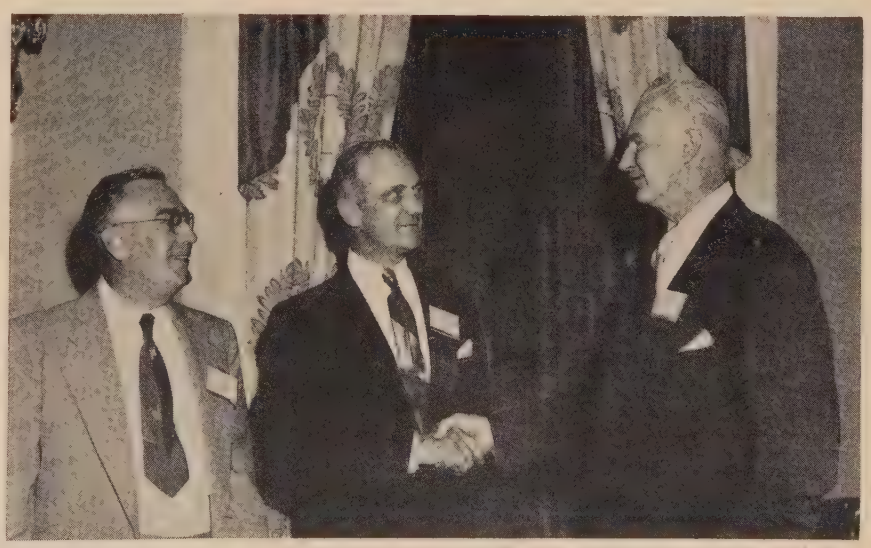
Salesmen should not consider marketing data as an enemy, Edward R. Martin, director of marketing and statistics, Gas Appliance Manufacturers Association, said at the opening day session. He stressed that with the knowledge of sales potentials, the salesman is made aware of his possibilities. Narrowing the gap between potential sales and actual sales is the task of advertising, promotion and practical application of marketing data at the local level.

The ultimate sale more often than not rests upon public relations, J. E. Drew, public relations director, Lever Brothers, told the gas salesmen. He said that public opinion will be a major factor in settling the "battle of the fuels." He set the basic aims of gas utility public relations as the simple task of telling the merit of the product and making friends with the people they do business with.

Each company, regardless of size, can fix the responsibility for public relations on one man in the organization. An appraisal of the company as it appears to other people in their relations with it would undoubtedly open PR avenues to



Council President Henry Rohrs (center), Elizabethtown Consolidated, greets two guest speakers from Servel, Inc.: Duncan C. Menzies, president, and Louis Ruthenburg, board chairman



Incoming Council President A. J. Hartmann (center), Con Edison, presided Tuesday morning. With him are speakers W. T. Briggs (left), John Wood Co., and J. E. Drew, Lever Brothers

W. H. KURDELSKI, *CHAIRMAN* • B. H. WITTMANN, *VICE-CHAIRMAN*

Panel discussion on gas clothes dryers was led by Norman Millard (behind sign), Bendix Home Appliances, who discussed how gas companies can increase share in dryer market

Two panel experts who led discussions on working with dealers were W. W. Selzer (left), Columbia Gas; and M. M. Gibbons, Brooklyn Union

George Duggan (standing) told how his company, East Ohio Gas, built up profitable base load through energetic promotion of gas-fired incinerators sales through dealer plan

be traveled by all in the company, Mr. Drew said.

Salesmanship itself, challenging and creative, faces its greatest opportunities at present, guest speaker Harry Bowser, director of sales education, L. Bamberger and Co., said in a talk at the final day's morning session. Buying power is at a peak and customers are asking that their desires for something new, something that stirs their pride of ownership, be sold to them. It is up to the salesman to respond to this demand, Mr. Bowser said.

Something new, something different was provided in a display of 14 new gas ranges. In his talk, "Panorama of Progress," H. P. Morehouse, Public Service Electric and Gas Co., described the improved ranges and during the first day luncheon the delegates voted on which range presented the best selling features. Mr. Morehouse is to tabulate the returns for manufacturers' information.

Other general session speakers included Servel, Inc., executives Duncan C. Menzies, president, and Louis Ruthenburg, board chairman. As they have told other recent sales conferences and meetings of gas utility executives, Mr. Menzies and Mr. Ruthenburg said that the gas refrigerator cannot compete with electric unless gas companies are willing to provide installation and service for appliance dealers.

Mr. Menzies said that no dealer would push a gas refrigerator sale if installation means $15 out of his own pocket. Through servicing, installation and financing the utility must give the dealer the same chance for a sure profit that he has from competing products.

Servel is putting itself in a sound financial position, Mr. Menzies said, and has already taken steps to assure better quality control and replacement of defective merchandise. He sees a bright future for gas air conditioning and revealed that field testing of a new Servel unit will begin in August.

Prospects in the gas water heater market were discussed by William T. Briggs, John Wood Co., Conshohocken, Pennsylvania.

Experts from specialized fields led the round-table meetings which were held both Monday and Tuesday afternoons. With three discussions running simultaneously, each delegate had a wide choice for participation.

The sale of built-in cooking units has risen from 10,000 in 1952 to 175,000 in

1954, according to E. W. Westland, Caloric Appliance Corp., who led a discussion on this subject. He said that quality standards must be maintained on this type of appliance if the industry is to keep built-in sales free of the "cheap label" that is hung on so many low end gas range sales.

A description of an aggressive campaign to sell gas house heating recently launched by Consolidated Edison of New York was given by Frank Powers, district sales manager. Shown at the conference was Con Ed's new color film on house-heating, which is shown at private "home parties" where a housewife is hostess to her friends.

A visitor from Cleveland told his New York and New Jersey colleagues that any utility willing to invest money in promotion can sell a new and profitable load—gas incineration. George Duggan said that his company, The East Ohio Gas Co., had lifted sales of gas incinerators from 1,976 units in 1950, the year a vigorous promotional and cooperative advertising campaign began, to 27,833 units in the peak year of 1953. He said that during the four years of the campaign, costs per sale had been $3 per unit for East Ohio and $3.46 for manufacturers and dealers.

Sales promotion as practiced by non-merchandising utilities was discussed by W. W. Selzer, Columbia Gas System Service Corporation. As business promotion manager, Mr. Selzer coordinates a broad program of dealer cooperation in the various territories served by Columbia subsidiaries, and he outlined many of the techniques used.

A recent venture is financing for dealers, with Columbia companies handling paper up to 90 per cent of list price. Mr. Selzer explained that the plan is set up to encourage the sale of quality appliances. Terms are limited to one year on low end sales, but are extended for higher priced appliances.

A gas company that sells appliances directly and yet maintains an old and close-knit relationship with its dealers is The Brooklyn Union Gas Company. How the advent of natural gas and a concerted jump to the bandwagon of gas house heating sales forced modifications and changes in dealer relations was described by Martin Gibbons of that company. While eager to enlist dealer support in selling and installing heating jobs, Brooklyn Union had to make sure that the equally important kitchen load was

(Continued on page 56)

Steps for utilities and manufacturers to take in order to capitalize on built-in range sales were subject of lively discussion led by E. W. Westland, Caloric Appliance Corp.

Two general sessions speakers, E. R. Martin, (left), GAMA, and H. P. Morehouse, Public Service of New Jersey, snapped by lens

PANORAMA OF PROGRESS
FLORENCE • HARDWICK • UNIVERSAL • NORGE • GLENWOOD
P & R RESEARCH • VERNOIS • ROPER • CALORIC • TAPPAN • DIXIE • MAGIC CHEF

Backdrop for conference luncheon was display of gas ranges, each incorporating some new design. Conferees participated in ballot on which offered best sales stimulation

A.G.A. nominations

(Continued from page 6)

For vice-chairman:

LESLIE A. BRANDT, vice-president, The Peoples Gas Light and Coke Co., Chicago, Illinois.

INDUSTRIAL AND COMMERCIAL SECTION

For chairman:

LAWRENCE E. BIEMILLER, manager, industrial fuel department, Baltimore Gas and Electric Co., Baltimore, Maryland.

For vice-chairman:

J. ROBERT DELANEY, manager, gas sales, Cincinnati Gas & Electric Co., Cincinnati, Ohio.

OPERATING SECTION

For chairman:

J. H. COLLINS, SR., general superintendent, gas department, New Orleans Public Service, Inc., New Orleans, Louisiana.

For first vice-chairman:

GROVE LAWRENCE, vice-president, Southern California Gas Co., Los Angeles, California.

For second vice-chairman:

V. F. BITTNER, assistant chief technical engineer, The Peoples Gas Light & Coke Co., Chicago, Illinois.

RESIDENTIAL

For chairman:

B. H. WITTMANN, assistant to vice-president in charge of sales, The Peoples Gas Light & Coke Co., Chicago, Illinois.

For vice-chairman:

W. D. WILLIAMS, vice-president in charge of sales, New Jersey Natural Gas Co., Asbury Park, New Jersey.

E. R. Acker

(Continued from page 25)

the actual experiences of a utility company that, since 1949, has had an active executive development program. He told how an outside consulting firm conducted a survey that showed "the company needed, first, training in supervisory techniques; second, clarification of relationships, duties, responsibilities and authority within the organization; and third, modernization of communications practice, using the term in its very broadest sense."

Mr. Acker said the situation revealed at Central Hudson was not worse or more difficult than in similar companies, but actually was "really typical of the more progressive companies which have been intelligently and honestly concerned about people and good management."

"Experience indicates," Mr. Acker said, "that these are the very companies which are least satisfied with their supervisory and management effectiveness and are doing the most to bring them to increasingly higher levels."

Mr. Acker related how Central Hudson began with a supervisory conference program, and then brought all levels of supervision into the development program.

"We are deeply impressed with the experience we have had to date," Mr. Acker said. "We have noted improved abilities and attitudes of many individual supervisors and are confident that we are making definite progress in the development of our future executive and supervisory personnel."

Other guest speakers at the workshop included:

Perrin Stryker Editor, *Fortune*	The JOB of the Executive
Florent E. Verdin Management Consultant	The MAN of MANagement
Earl G. Planty Executive Counsellor Johnson & Johnson	Executive Development Program
F. Alexander Magoun Consultant, Human Relations in Industry	The Individual & His Personality: Psychology & Its Application
Dr. Samuel Pratt Consulting Sociologist	Men in Groups & Group Behavior: Sociology & Its Use
Gilbert David Vice President & Gen. Mgr. D. E. McNicol Pottery Co.	Learning—Formal & Informal: Modern Practice & Use of Learning Theory
Walter D. Woodward Consulting Psychiatrist American Cyanamid Co.	Industrial Problems in Human Relations: Counseling & Psychiatry
Walter H. Sammis President Ohio Edison Company	Informal discussion with groups on "What Top Management Needs in Their Reports"

Industrial relations

(Continued from page 18)

Board has ruled that an automatically-renewable contract does not constitute a bar to a representation election, where the automatic renewal is forestalled and the agreement terminated by the union's timely notice of intention to reopen the entire contract. *(See Union Bag and Paper Corporation and Machinists, AFL; NLRB, Case No. 2-RC-6941; December 16, 1954.)*

Group leaders as supervisors—The National Labor Relations Board has ruled that group leaders who work with tools and possess authority to recommend imposition of discipline or change in pay and working conditions are supervisors under the Taft-Hartley Act. *(See Bethlehem Steel Co. and Marine Shipbuilding Workers, Local 33, CIO; Case No. 5-RD-114; January 11, 1955; 111 NLRB No. 26.)*

Home economists not professional employees—The National Labor Relations Board has ruled that, even though a degree is a requirement for employment, home economists, who give lectures and demonstrations in the use of home appliances to groups of their employer's customers, are not professional employees under the Taft Act. *(See Potomac Electric Power Co. and IBEW, AFL; NLRB, Case No. 5-RC-1473; February 9, 1955.)*

Industry news

Colleges exhibit educational material

THIS SUMMER the A. G. A. Educational Service Committee is initiating a new method of publicizing the availability of gas industry educational material, it is announced by Frank H. Trembly, chairman. At the colleges and universities listed, professional exhibits of all the materials published so far by the Educational Service Committee will be shown.

Included are the latest editions in the "SCIENCE IN ACTION" series, which include "Science Principles and Your Automatic Gas Range," "Science Principles and Your Automatic Gas Clothes Dryer," and "How Your Gas Meter Works," as well as the already well-known "Experiments with Gas," "Advanced Experiments with Gas" and "NATURAL GAS—Science Behind Your Burner" kit.

Thousands of teachers who will be attending summer schools and working for advanced degrees, will now be able to see, study and discuss the impact of this fine source of information about the American gas industry, and can request those pieces they can best use in their own pursuits of learning.

The Educational Service Committee requests that utility members with offices in the vicinity of these colleges and universities suggest to their own company personnel charged with their individual school education programs that they visit these exhibits and check to see that the A. G. A. educational display is prominently located.

"This A. G. A. educational exhibit will be shown with those of other industries which are also aware that today's students are tomorrow's homemakers," Mr. Trembly said. "School authorities tell us that we can point with pride to the calibre of our endeavors and be assured that they will be well received by the teaching profession."

Glick and Keefe, New York, specialists in the education field, are managing the placement of these exhibits.

Colleges and Universities which will have Summer Displays are:

ARIZONA, University of Arizona, Tucson; ARKANSAS, University of Arkansas, Fayetteville; CALIFORNIA, Los Angeles State College, Los Angeles; University of Southern California, Los Angeles; COLORADO, Colorado State College of Education, Greeley; CONNECTICUT, University of Connecticut, Storrs; DELAWARE, University of Delaware, Newark; FLORIDA, University of Florida, Gainesville; and IDAHO, University of Idaho, Moscow.

Also, ILLINOIS, Loyola University, Chicago; National College of Education, Evanston; INDIANA, College of Education, Indianapolis; IOWA, University of Iowa, Iowa City; KANSAS, University of Kansas, Lawrence; KENTUCKY, University of Kentucky, Lexington; LOUISIANA, Tulane University, New Orleans; MARYLAND, University of Maryland, College Park; MASSACHUSETTS, Harvard University, Cambridge; and MICHIGAN, University of Michigan, Ann Arbor.

Also, MINNESOTA, University of Minnesota, Minneapolis; MISSISSIPPI, University of Mississippi, University; MISSOURI, University of Missouri, Columbia; MONTANA, Montana State University, Missoula; NEVADA, University of Nevada, Reno; NEW HAMPSHIRE, Keene Teachers College, Keene; NEW JERSEY, Rutgers University, New Brunswick; NEW YORK, Brooklyn College, Brooklyn; Columbia University, New York City; New York University, Washington Sq., New York City; Syracuse University, Syracuse; NORTH CAROLINA, University of North Carolina, Chapel Hill; NORTH DAKOTA, University of North Dakota, Grand Forks; OHIO, Ohio State University, Columbus; Western Reserve University, Cleveland; OKLAHOMA, University of Oklahoma, Norman; and OREGON, University of Oregon, Eugene.

Also, PENNSYLVANIA, University of Pennsylvania, Philadelphia; University of Pittsburgh, Pittsburgh; SOUTH CAROLINA, University of South Carolina, Columbia; SOUTH DAKOTA, South Dakota State College, College Station; TENNESSEE, University of Tennessee, Knoxville; TEXAS, Baylor University, Waco; UTAH, University of Utah, Salt Lake City; VERMONT, University of Vermont, Burlington; VIRGINIA, University of Virginia, Charlottesville; WASHINGTON, University of Washington, Seattle; WEST VIRGINIA, West Virginia University, Morgantown; WISCONSIN, University of Wisconsin, Madison; WYOMING, University of Wyoming, Laramie; and DISTRICT OF COLUMBIA, The American University, Washington, D. C.

Peoples Gas wins top honors in Safety Council competition

FOR THE SECOND consecutive year, and for the third time in the last four years, The Peoples Natural Gas Co., Pittsburgh, has placed first among major natural gas companies competing in the annual safety contest sponsored by the National Safety Council.

Only seven disabling injuries, some of minor character, were experienced by company employees throughout 1954.

Safety Director Leo Nuhfer attributed the 1954 prize winning-record to the excellent cooperation he received from employees.

"Employees trained in proper safety procedures," he added, "not only spare themselves the hardships caused by untimely accidents, but also give added assurance of safe service for the gas-consuming public."

Mr. Nuhfer, chairman of the A. G. A. Accident Prevention Committee, said System-wide safety training programs "have been designed to benefit both the employee and the public served by the employee."

As illustrations, he cited the completed System-wide training Peoples' employees have had in fighting gas fires and in wearing hose masks while repairing leaks.

Other safety practices in effect at Peoples include Monday morning safety conferences and "tail gate safety talks."

In three of last four years, The Peoples Natural Gas Company has ranked first among natural gas companies in National Safety Council competition. Above, E. J. Hanley, president, Western Pennsylvania Safety Council, presents plaque for year 1954 to Leo Nuhfer, Peoples Gas safety director

A. G. A. calls in Univac to compute operating tables

a PAR activity

ELECTRONIC COMPUTING was used in the publication of the 4,000 tables in the new "Tables of Supercompressibility Factors for Natural Gas." American Gas Association called on the Remington Rand Univac to compute and prepare the operating tables of supercompressibility factors, based on a method of evaluation presented in the new A. G. A. Gas Measurement Committee Report No. 3 "Orifice Metering of Natural Gas."

The new tables will provide the gas industry with expanded, error-free operating tables of supercompressibility factors and will eliminate errors and differences in interpolation and rounding when using less extensive tables.

A group of seven companies in the gas industry sponsored a project, supervised by Professor Samuel R. Beitler at Ohio State University, to develop a method of evaluating supercompressibility factors for natural gas without making separate laboratory determinations. The sponsors released the results of this project to A. G. A. for inclusion in Report No. 3.

The operating tables of supercompressibility factors, with nearly 2,300,000 entries involved, are being published in seven volumes; six volumes are for hydrocarbon gas supercompressibility factors, each volume covering a pressure range of 500 psig. A seventh volume is to be released for gases having carbon dioxide and/or nitrogen contents within the range of 0 to 5.0 and 0 to 12.0 mol percent, respectively.

The seven-volume report will be available in July from A. G. A. Headquarters.

CGA praises industry progress, elects Geldard president

SOME 400 delegates from seven Canadian provinces and several U.S. states heard gas industry leaders express confidence in the future of the Canadian gas industry at the 48th annual convention of the Canadian Gas Association in the Sheraton-Brock Hotel, Niagara Falls, Ontario, June 5-9.

P. W. Geldard, Consumers' Gas Company of Toronto, was elected president of the association for 1955-56, succeeding S. B. Severson, Buffalo, Dominion Natural Gas Co. Ltd. F. R. Palin, Union Gas Company of Canada Ltd., Chatham, was elected first vice-president, and H. L. Purdy, Vancouver, British Columbia Electric Co. Ltd., was named second vice-president. W. A. Higgins was appointed secretary and treasurer.

Mr. Severson, opening the convention, outlined the progress of the gas industry in Canada and called it "one of the largest and fastest-growing industries in the land." Delegates were officially welcomed by Mayor Ernest Hawkins of Niagara Falls.

Speakers in the opening morning sessions included F. M. Banks, president, American Gas Association, who spoke on "Progress of Our Industry on This Continent"; Frank H. Adams, president, Surface Combustion Corp., Toledo, Ohio, who spoke on "Gas Promotion on the March"; and Dennis K. Yorath, general manager, Northwestern Utilities Ltd., Edmonton, whose address was entitled "Natural Gas in the Limelight." [Excerpts from Mr. Banks' speech appear on page 11.—Ed.]

Following a luncheon on the first day, the Manufacturers Section held its annual meeting under Chairman W. H. Evans, Minneapolis-Honeywell Regulator Company. The following discussions groups were also held: Transmission and Storage, R. C. McPherson, chairman, and Gavin H. Martin, vice-chairman; Conversion to Natural Gas, P. W. Geldard, chairman; and Accounting and Finance, F. R. Palin, chairman.

T. T. Arden, Long Beach, Cal., president, Gas Appliance Manufacturers Association, told delegates there are "vast and unsatisfied markets immediately ahead of us." The industry must have good management, product development, good sales, promotion and public relations programs to tap this market successfully. Only through engineering and technological research can proper product development be realized, Mr. Arden indicated.

W. D. Williams, New Jersey Natural Gas Co., said natural gas must be presented to the public as a "new industry, something entirely new," and the accent should be on the word "natural."

Suggestions for greater cooperation among manufacturer, utility and dealer were heard during a panel, "Our Industry's Merchandising Triangle." Speakers were J. C. McCarthy, Consumers' Gas Company of Toronto; George I. Harrison, Canadian Tappan Stove Ltd., Ville St. Laurent, Quebec; and Paul V. Lowes, Lyons Engineering Co. Ltd., Toronto.

"Natural Gas on the March" was the theme for a panel of industry leaders representing various parts of the country. Plans and prospects for the trans-Canada pipeline were discussed by A. P. Craig, vice-president in charge of sales, Trans-Canada Pipe Lines Ltd. He indicated a possibility that obstacles might be cleared this year for a start on the Toronto to Montreal line, although there was no definite commitment on this.

Other panel speakers expressed optimism and looked forward to great expansion when the pipeline becomes a reality. W. F. Davey, Winnipeg and Central Gas Company, foresaw many new chemical and other industries springing up once natural gas begins to flow across Canada.

Other speakers included E. H. Rohrer, British Columbia Electric Co. Ltd., who said plans were developing for the introduction of natural gas to the Pacific area; B. F. Willson, Northwestern Utilities Ltd., who pointed out that expansion in Alberta has been evenly distributed over the main classifications; J. R. Sarsfield, Saskatchewan Power Corp., who said high standards of installations were supported in Saskatchewan and that sales courses were offered to young employees of dealers; O. L. Jones, Consumers' Gas Company of Toronto, who said that acceptance of natural gas was all-important and that frankness and provision of all the facts was one way to influence the public favorably.

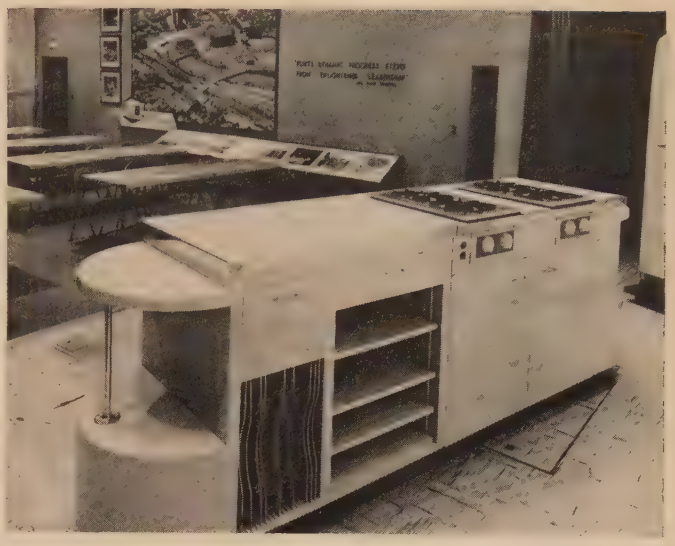
Harold E. Eckes, The East Ohio Gas Co., Cleveland, outlined public relations techniques used in his firm and the methods of dealing with press, radio and TV representatives.

A Gas Promotion and Merchandising Conference was held under Chairman George M. Douglas, Union Gas Company of Canada Ltd. and Vice-Chairman J. C. McCarthy, Consumers' Gas Company of Toronto. "Natural Gas Marketing" was the topic of Gordon Whitney, Stone and Webster Service Corp., New York City. A discussion group on distribution problems was chaired by K. J. Burnett, United Gas and Fuel Company of Hamilton Ltd.

Leading figures at CGA convention are new president, P. W. Geldard (l.), distribution engineer, Consumers' Gas Company of Toronto, and past president, S. B. Severson, Dominion Natural Gas Co., Ltd.

Utility demonstration unit combines beauty, flexibility

A demonstrator's delight is the composite unit with built-in burners at home service headquarters, Consumers Power Co., Flint, Michigan. Audience interest remains at a peak as the demonstrator cooks facing forward, with an overhead mirror as an instruction aid. The entire surface burner section may be removed and replaced by a range if necessary.



Marjorie Bettesworth, system home service supervisor, gave careful attention to compartment arrangement. The back view (pictured above) shows: tilt-out bin for waste, with removable metal liner, top left; vertical storage area for serving trays, bottom left; utensil drawer, top center; demonstration tray shelves, bottom center; utensil compartments bottom right

API publishes 'Standard for Field Welding of Pipe Lines'

AMERICAN PETROLEUM INSTITUTE announces publication of the third edition, API Std. 1104, "Standard for Field Welding of Pipe Lines," for March, 1955. Approximately 4,000 copies of the second edition have been sold.

The 26-page illustrated booklet, priced at 50 cents, was supervised by the API-A. G. A. Joint Committee on oil and gas pipeline field welding practices, of which R. G. Strong is chairman, A. G. Barkow, secretary. Instrumental in the preparation of this booklet are representatives of API, A. G. A., Pipe Line Contractors Association, Society for Non-Destructive Testing, pipe manufacturers, American Welding Society, and the Radiographic Subcommittee.

The specification is intended to apply to cross country pipelines for the transmission of crude petroleum, petroleum products, and natural gas.

Window poster display stresses gas uses, attracts public

A CENTER OF ATTRACTION at the recent Pittsburgh Home Show was the promotional exhibit created by the Pennsylvania Natural Gas Men's Association. A "window" displaying a series of 12 posters rotating automatically on a track set behind the frame formed the focal point of the exhibit. Each of the original series of posters shown is a color painting executed with fluorescent paint, highlighted with a black light during a portion of the period it is in view.

Captions describing the illustrations point out the advantages of gas. The captions used are: GAS Provides the Accurate Temperature Control for Precision Heat Processing of Steel Billets; Foamglas . . . Precision Heating Process Replaces Alloying in Manufacture of Oilwell Casing; GAS Removes Cutting Edges and Mold Marks, Smooths Grinding Marks, Seals Incipient Cracks and Fissures; Precision Cooking with GAS Makes Your Favorite Candy Taste Better; Ink Drying with GAS Speeds Your Favorite Magazine to Your Door; In Pennsylvania Homes Everybody Eats Better Bread. . . . Thanks to GAS.

Others in the series are: GAS Reduces Firing Time by ⅓ for Manufacture of Fire Brick; Flame Hardening with GAS Speeds Production of Heavy Machinery; GAS Economically Produces Temperatures Up to 3000F for Open Hearth Furnaces; Automatic Gas Equipment Assures Strong Vacuum-tight TV Tubes; GAS Does All the Major Household Jobs Best, Too!

The association plans to develop additional posters on promotional themes in the future.

Texas Eastern gets permission to reconvert Little Big Inch

TEXAS EASTERN TRANSMISSION CORP., Shreveport, La., has received Federal Power Commission approval, by unanimous vote of the full five man commission, for the removal of the major portion of the Little Big Inch system from natural gas service and the construction of substitute facilities to maintain the company's gas delivery capacity.

According to George T. Naff, president, this decision and the related order and certificate by the Federal Power Commission will permit Texas Eastern to proceed with reconversion to the transportation of petroleum products of 1,168 miles of the Little Big Inch line extending from Beaumont, Texas, to a terminal on the Ohio River near Moundsville, West Virginia. The approved project calls for an expenditure of approximately $86,600,000, of which $14,800,000 is allocated for the Little Big Inch reconversion and $71,800,000 to cover the cost of construction of a 382 mile pipeline and related facilities.

These new facilities will maintain present gas pipeline capacity despite the retirement of the Little Big Inch from gas service.

The Federal Power Commission declared that there appears to be no question about Texas Eastern's ability to finance the project.

Mr. Naff's announcement pointed out that the basis for senior financing has already been arranged by an agreement entered into by Texas Eastern with eight insurance companies providing for the sale to them of $40,000,000 principal amount of first mortgage 3¾% pipeline bonds.

"The reconversion project for the Little Big Inch will be set in motion at once," Mr. Naff said, "and we expect that the line will initiate operation as a common carrier of refined oil products (including liquefied petroleum products) by or before the fall of 1956."

Mr. Naff said that the petroleum products pipeline operation will be conducted as a division of the parent company, but that such operation, unlike the gas pipeline operation, will be subject to the jurisdiction of the Interstate Commerce Commission pursuant to the provisions of the Interstate Commerce Act.

Association names Bolender president, discusses natural gas

Heroic winner of the A. G. A. McCarter medal for lifesaving is S. L. Sherman (l.) Peoples Water and Gas. J. C. Bolender presented award

THE ANNUAL general management conference of the Florida-Georgia Gas Association was held recently at the Key Biscayne Hotel, Miami, Florida. John C. Bolender, vice-president and general manager, Peoples Water and Gas Co., was elected association president for the coming year, and Joseph Frink, Florida Power and Light Co., was re-elected secretary-treasurer.

Discussion during the three-day session centered around natural gas in connection with the current boom in oil exploration in Florida. Speaking in behalf of a pipeline to Florida were F. E. Stanley, chairman of the board, Houston Texas Gas and Oil Corp.; Charles C. Barnard, partner, Barnard & Burk; and W. A. McIntyre, Porter-Barry Associates, who presented a paper entitled "Natural Gas from Well-Head to Burner Tip in Florida."

W. B. Tippy, president, Commonwealth Services, Inc., presented a plea for the manufacturers of synthetic natural.

Other speakers were: S. F. Wikstrom, promotion manager, American Gas Association, who spoke on the value of advertising through the PAR Program; Howard E. Ferris, vice-president, Savannah Gas Co., who gave a statistical account of his firm's experiences in converting to natural gas; Phillip C. Crowen, president, Peoples Water & Gas Co., who dealt with problems of finance in relationship to the distributing companies; Captain E. E. Pettyjohn, Institute of Gas Technology, who spoke on "Peak and Base Load Research Developments in Hydrogasification."

Harold E. Janes, Florida Railroad and Public Utilities Commission, monitored a discussion and question meeting that served to clarify the stand of the commission on standards of service for gas utilities.

Highlights of the conference were the introduction of Mrs. Toby Birne, Mrs. Florida for 1956, and the presentation of the McCarter medal for lifesaving to Stewart L. Sherman, serviceman, Peoples Water and Gas Company.

Mr. Sherman won the medal for saving the life of a woman attempting suicide by gas.

Shareholders to vote on Pacific Northwest merger proposal

DIRECTORS of Seattle Gas Company and Washington Gas & Electric Company have unanimously signed an agreement to merge the two companies.

The separate actions of the two boards were announced in a joint statement issued by Walter S. Byrne, president of Seattle Gas, and Allen Peyser, president of Washington Gas & Electric. Meetings of shareholders of the respective companies will be held late this month to vote on the proposal. Full details of the proposal were submitted to shareholders several weeks ago.

In their statement Mr. Byrne and Mr. Peyser pointed out that the proposal has been given a detailed and impartial study by Stone & Webster Service Corp., one of the best known firms in the field of utility management. The Stone & Webster report is "distinctly encouraging" in its findings, they said.

"The merger will not only benefit shareholders of the two companies but will provide many benefits to the customers of the two gas distributing companies and to the entire region we serve," Mr. Byrne and Mr. Peyser said.

The service area of the two companies is the industrial heart of the growing Puget Sound Basin.

The merger will permit the development of the areas lying between the communities now served by Seattle Gas and Washington Gas & Electric.

Consumers earns four safety citations

Safety is the byword at Consumers Power Co., as four A. G. A. awards are accepted at the firm's sixth annual safety conference. Awards signify one, two, and three million accident-free man hours at the Lansing division, and accident frequency reduction in gas department. Left to right are President D. E. Karn, Division Manager W. R. Carlyon, Employee Relations Vice-President H. S. Richmond, I. R. Dohr

LP booklets

TWO VERSIONS of the attractive new consumer booklet produced by the National Council for LP-Gas Promotion, "LP-Gas . . . Modern Fuel for Millions," are now being offered to industry companies for imprinting and local distribution.

The first, the same as the 24-page selling tool employed by the LP-Gas Information Service in response to requests resulting from advertising and publicity, is useful to bulk dealers. It contains promotional copy on all major uses of LP-gas, and a page stressing the importance of adequate storage facilities on consumer premises. The second, a 16-page adaptation, de-emphasizes heating and farm applications, and is designed for bottled gas operators.

Printed in two-color offset and amply illustrated, both booklets have back page space for dealer imprint. Prices, ranging from $6.80 to $10.50 per 100 copies on the 24-page version and $5.60 to $8.50 per 100 copies on the bottled gas version, depend on quantity and whether the purchaser is a participant in the National LP-Gas Promotional Program. A 20 percent discount is granted to members.

Sample copies of both booklets may be obtained by writing to: National Council for LP-Gas Promotion, 185 N. Wabash Ave., Chicago 1, Illinois.

Steel Pier crowds visit display home

LAST MONTH marked the start of the twentieth season for the all-gas "Home of the Century," the fully-equipped display home at Atlantic City's Steel Pier, viewed by over 500,000 people annually. The home is on exhibition seven days a week, with trained hostesses present at all times to explain displays and demonstrate products. It will be open to visitors until September 15.

The home is actively promoted by means of weekly features and spot radio programs, special events, news releases, and action news photographs. Approximately 250,000 people annually read "The Home of the Century Book," a 36-page promotional pamphlet with captioned photographs of all appliances, and a listing of each manufacturer represented and the product he markets. The policy has been that no competing products are displayed or promoted in any classification of materials or equipment.

Designed by Philadelphia Architect William F. B. Koelle, the home is presented to the public with the cooperation of the American Gas Association and the Gas Appliance Manufacturers Association. Major gas appliances on display include: Permaglas water heater; Whirlpool laundry; Caloric range; Servel refrigerator; and Calcinator disposal unit.

Each exhibitor is privileged to distribute promotional consumer literature, and the name of each exhibitor appears on a framed list outside and inside each room of the "Home of the Century." In addition, all product displays are labeled with the exhibitor's name.

Youthful meter-ologist

Robert Fullerton, 16, constructs ingenious gas meter for entry in Pittsburgh science fair. Operated by stream of air from hair dryer, meter goes into action at press of button, illustrating how gas is measured. Robert, son of Equitable Gas Company meter repairman, also made use of a TV antenna, a mirror, and a breakfast tray, in construction and covered both the top and the front with glass to allow the viewer a close-up look at the intricacies and movements of the interior workings

Woman among 45 IGT 'graduates'

THE ONLY WOMAN among 1081 enrollees to date in the Institute of Gas Technology's home study course "Natural Gas Production and Transmission," Mrs. Ida Belle Spinks, Houston, Texas, has received the Certificate of Accomplishment for satisfactory completion of the course. The course is prepared with the cooperation of the American Gas Association.

Mrs. Spinks, administrative secretary, United Gas Corp., had a head start on some male enrollees; she had taken a geology course while earning a B.B.A. at the University of Texas.

She received her certificate in May, along with 44 men, the largest group to "graduate" in any one month since the home study program started a little over two years ago. Included in this group are 20 men from Central Illinois Electric and Gas Company.

Safety measures distinguish model all-gas home in Ohio

A MODERNISTIC all-gas ranch-type house, designed to eliminate most major causes of household accidents, opened for inspection last month at Lyndhurst, Ohio. This 1955 "Home of Safety" boasts special features such as: non-skid, double-railed basement steps; two-temperature scald-proof Ruud automatic gas water heater; single-handle safety mixing valves in sink, washbowls, shower, lavatory, washtubs; and colorless, non-slip finish on tub.

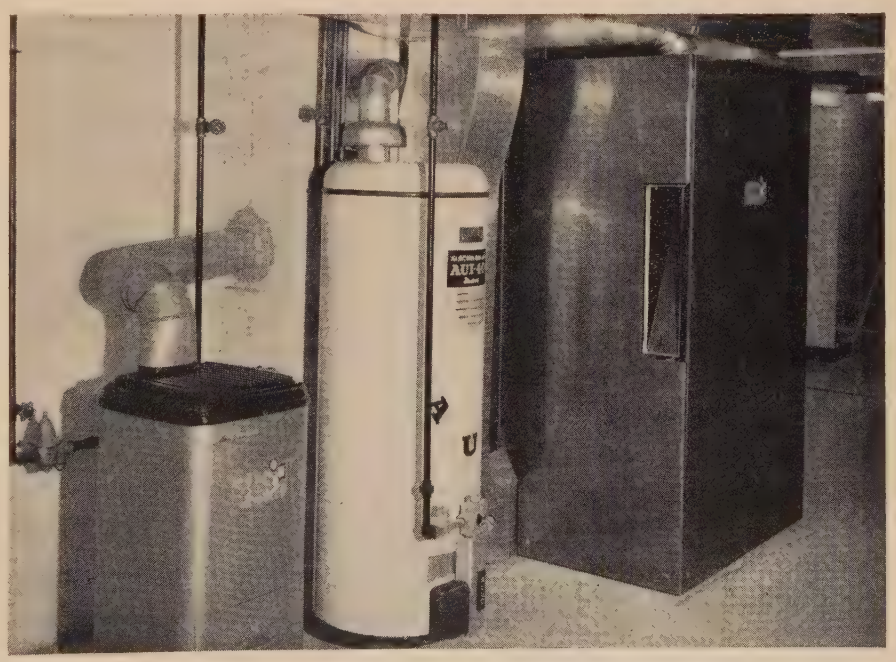
Prompted by the rise in household accidents in the past few years, a special committee, headed by James Chandler, home magazine editor, *The Press*, decided to design and build a house which would omit most of the potential danger traps of today's homes.

Working with Mr. Chandler were: Peter J. Negrelli, president, Di Carlo Mason & Building Co.; Bill Hanna, executive vice-president, Home Builders Association of Greater Cleveland; Mrs. Norma Wulff, home safety chairman, Greater Cleveland Safety Council; and Harry Hogan, residential sales manager, The East Ohio Gas Company.

The "Home of Safety" has no steep drops in grade; sidewalk ramps extend to the front door, to prevent falls. The sidewalk and driveway have a rough finish and are graded to a slight slope, thus preventing puddles and spots of ice from forming. Hedges, trees, and shrubs do not obscure the view of the street, or hide the approach of children to the driveway.

Year-round Servel gas air conditioning was selected as a safety and health factor. This unit and all other gas appliances were approved by the American Gas Association, and installed according to A. G. A. recommendations. Automatic shutoff works if the pilot fails, and the refrigerant is non-combustible and non-toxic.

A built-in oven at no-stoop height is considered a safety item, as it facilitates handling of hot roasting pans and other such utensils. Both oven and built-in range are "matchless." Appliance arrangement permits a free flow of traffic, and counter space adjacent to both range and refrigerator eliminates attempts to carry too many items at one time.



"Home of Safety" basement spotlights gas appliances. Pictured above are Warm Morning incinerator, Ruud water heater, Servel year-round air conditioner. Specially designed for safe and healthy living, the home also contains Servel refrigerator, Roper range and built-in oven, and Bendix washer-dryer

Seven million ranges

Split-second production halt on Magic Chef, Inc.'s lines allows photographer to snap picture of firm's seven millionth domestic gas range, designated for Mrs. America. Marking occasion with a handshake are President Cecil M. Dunn (left), and Philip A. Foppe, employee with longest term of service

Offer general management conference papers

SIXTEEN PAPERS presented at the General Management Section spring conference, March 21-23, at Cincinnati, are now available free of charge from the American Gas Association, as follows:

"The Economic Outlook," by Dr. C. F. Roos; "When Everybody Is Somebodee, Nobody Is Anybody," by W. A. Paton; "What Is Management Development?" by F. M. Banks; "Constructive Planning in Health Insurance," by D. D. Cody; "Excess Liability Insurance," by R. S. Gillespie.

Also, "Economic and Social Implications of Extending Fringe Benefits," by J. M. Hines; "The Future of the Gas Industry in the Atomic Age," by Dr. J. R. Dunning; "Settlement of Labor Disputes in Public Utilities," by Dr. Robben Flemming; "How We Contribute to Accident Prevention," by Messrs. Mulvihill, Provonchee, Groves, and Owens; and "Management Development—What Can a Company Do?" presented by a four-man panel headed by Richard Donham.

Subcommittee reports available are: "Mechanized Stock Control," by H. D. Dusinberre; "Material Handling Subcommittee Report," by T. S. Dunstan; "How, When, and Why Small Purchases," by A. E. Altenhofen; "Selection and Training of Stores Personnel," by J. C. Sims; "Inspecting and Testing Materials and Equipment," by C. O. Ellis; and "Centralization vs Decentralization," presented by Messrs. Parkes, Rodgers, Firestone, and zur Nieden, with J. F. Quigley acting as chairman.

NACE sponsors course

A FIVE-DAY short course on corrosion sponsored by Washington University, St. Louis and Greater St. Louis section, National Association of Corrosion Engineers will be held September 12-16.

The course covers corrosion theory, metallurgical and mechanical factors, types of corrosion, designing to prevent corrosion, treatment of environments, materials selection, cathodic protection and protective coatings.

Fire prevention hints

A VALUABLE pamphlet detailing precautionary measures in fire prevention has been published by Improved Risk Mutuals, an association of eleven insurance companies. "Prevent Fire by Guarding against Cutting and Welding Hazards" contains specific information on fire causes, prevention, and equipment maintenance, and can be secured from: Improved Risk Mutuals, 15 North Broadway, White Plains, New York.

Rheem awards ranch house as promotional contest prize

A WESTERN-STYLE ranch house, completely equipped with Rheem-Wedgewood gas appliances and equipment, is the grand prize in a "name the house" contest sponsored in 16 Western states by Rheem Manufacturing Company and White King Soap Company. The winner of the contest may take the model home, currently on display in Costa Mesa, Cal., or have an exact duplicate built in his home town.

The Rheem "dream home," a three-bedroom-and-den model, features a Rheemglas water heater, Rheem water softener and year-round air conditioning equipment, Rheem-Wedgewood built-in clothes dryer and built-in gas range. The home has two full baths, hardwood floors, heavy shake roof and brick fireplace.

Additional prizes of 120 Rheem-Wedgewood Select-O-Matic gas ranges and clothes dryers were awarded to weekly winners in the six-week competition. Contestants were required to submit a name for the Rheem Dream Home, tell in 20 words or less why the name was selected, and enclose with the entry a box top or label from a White King product. The contest ended June 26.

ASTM Committee D-3 plans new projects

An organizational meeting of the American Society for Testing Materials Committee D-3 on Gaseous Fuels met at A. G. A. Headquarters under chairmanship of L. T. Bissey, Pennsylvania State University

Battelle expands

BATTELLE Memorial Institute, Columbus, Ohio, announces completion of three new buildings designed specifically for pilot work, at a cost of approximately $400,000. One of the buildings, planned for chemical engineering research, is situated adjacent to the firm's chemical laboratory building in Columbus.

The two other new buildings are situated on the organization's 400-acre site at West Jefferson, on the outskirts of Columbus. The location was selected because of its varied terrain, relative quiet, and minimum of air and stream pollution. It is adaptable to agricultural programs, microwave propagation studies, and transmission line investigations.

The West Jefferson buildings will be provided with facilities for large-scale studies in chemical engineering, mechanical engineering, and metallurgy. The smaller will house offices and chemical and testing laboratories; the larger will contain large equipment, including a new 500-kva, three-phase transformer, equipped with automatic controls and over 100 voltage taps, which can be used with various types of electric furnaces for semi-commercial melting and smelting operations, and for many electrolytic processes.

Issue bulletin

a PAR activity

A BULLETIN APPRAISING INFORMATION available from the literature on the venting of gas appliances has been issued by the American Gas Association Laboratories. It summarizes phase I of Project DA-3-HA sponsored as a PAR plan activity by the Association's Committee on Domestic Gas Research.

Research Bulletin No. 68, "Literature Review and Design Studies of Gas Appliance Venting Systems," presents information on venting conditions during steady state operation of gas appliances and the design and operation of venting systems. Sections of the bulletin discuss effects of excessive updrafts, downdrafts, draft hoods, methods of system inspection and correction of defects, causes and correction of condensate in chimney and vent pipes and other facets on the venting of gas appliances. Limited discussion is given on multiple venting and multi-story vent systems.

Two approaches to vent system design are discussed. One deals primarily with the question of maximum vent system capacity and employs grid charts to permit solution of many venting problems. The second approach deals with the flow and heat-loss relationships in the venting system and introduces the concept of minimum vent capacity.

Copies of this 245 page bulletin may be obtained at $2.50 each from: A. G. A. Laboratories, 1032 East 62nd St., Cleveland 3, Ohio.

Portable LP container aids demonstrations

A SAFE and convenient means of supplying fuel for gas ranges and refrigerators in cooking schools, appliance demonstrations, and other off-the-line uses, has been developed by utilization engineers at Equitable Gas Co., Pittsburgh. The unit was designed by Engineer William B. Ciprella, at the request of the safety division.

The compact, portable case encloses bottled gas and all necessary control and regulating fittings. It is made of aluminum, with a fire lid, and has two handles for carrying ease. Its two 20-pound tanks work automatically; a regulator switches from an empty tank to a full one. A red marker shows that one tank has been emptied. The over-all cost, including two tanks, is $118.

The coupling-equipped flexible connectors in the box make it unnecessary to improvise installations when a demonstration is planned. When not in use, a valve is closed, a hose disconnected, and the container is locked.

This container spares time and effort compared to former methods of arranging for supplementary gas supplies where natural gas is not immediately obtainable. Often an appliance service crew had to get bottled gas and install improvised connections for each demonstration.

Sometimes copper tubing was strung for many feet into the building from outside gas supplies. Rearrangement of work schedules was often necessary due to demonstrations on short notice, and makeshift tank installations had no adequate safeguards against accidental damage and tampering.

W. B. Ciprella, Equitable utilization engineer, points out compactness of his portable LP container to Kathryn Barnes, home service manager

Equitable states that although safety and fire prevention were prime considerations in designing the container, great convenience and financial savings in labor costs have resulted from its use.

Magic Chef decentralizes its sales offices

THE MANAGEMENT of Magic Chef, Inc., has recently announced expansion and decentralization plans.

Magic Chef has placed its present St. Louis administration building on the market. Regional sales offices have been established in New York, Cleveland, Chicago, Cincinnati, Pittsburgh, St. Louis, Atlanta and Los Angeles. Negotiations are under way for a location in Philadelphia, and consideration is being given to establishments in the Southwest, Northwest and Intermountain areas. Staff offices will soon be moved to a company owned building directly adjacent to the St. Louis factory buildings.

Midwest Industrial Gas Council holds two-day meeting

THE MIDWEST Industrial Gas Council held its annual spring meeting at the Wisconsin hotel, Milwaukee, May 26 and 27. About 100 gas men from seven neighboring states were in attendance. The meeting was hosted by the Milwaukee Gas Light Company.

Chairman J. C. Gurche, Panhandle Eastern Pipeline Co., Kansas City, Mo., opened the meeting on Thursday and J. H. Mikula, general sales officer for the Milwaukee company, welcomed the visiting engineers to the city.

Other speakers on the program were R. S. Van Note, district manager, Selas Corporation of America; David J. Stark, plant manager, National Petro-Chemicals Corp.; and Gladstone Keir, C. M. Kemp Mfg. Company.

Later in the day a tour was made of the Schlitz Brewery including an inspection of the gas-fired equipment at the plant. On Friday, inspection trips by buses were made to the plants of International Harvester Co., Nordberg Manufacturing Co., Continental Can Co., and A. O. Smith Corporation.

Members predicted increased sales of natural gas to Milwaukee industry, to occur as soon as a proposed new natural gas pipeline has been run from Louisiana to Wisconsin.

Reviewing notes at Midwest Industrial Gas Council two-day meeting are (l. to r.): J. R. Woodfill, Hammond, Ind.; G. C. Lewis, Bellwood, Ill.; Chairman J. C. Gurche, Kansas City, Mo.; J. H. Mikula and C. C. Desmond, Milwaukee. The next meeting of the council will be held in Chicago on October 14

Peoples Gas Light earns centennial praise for leadership

ONE HUNDRED years of uninterrupted gas utility service to the people of Chicago was hailed by the directors of the Chicago Association of Commerce in a resolution praising The Peoples Gas Light and Coke Company for its "outstanding leadership in the public utility industry."

A testimonial plaque was presented to James F. Oates, Jr., chairman and chief executive officer, during ceremonies at the company's executive offices on June 16.

The Peoples Gas Light and Coke Company received its charter from the state of Illinois on February 12, 1855.

The resolution also praised Peoples Gas for earning the "faith and good will of the millions of Chicagoans it serves so efficiently every day of the year" and extended tribute to the company officers, directors and employees "for their inspiring record of achievement."

A.G.A. chart lists special features of current gas ranges

PROSPECTIVE buyers frequently know exactly what features they want in a gas range but are faced with the problem of finding the manufacturer who supplies a range with those features. A chart designed to provide a ready approach to such questions has been prepared by A. G. A. Utilization Bureau and is available at 10 cents per copy. Larger quantities are supplied at reduced prices.

The chart shows at a glance which manufacturers are producing one or more models of gas ranges having some special feature. Forty cooperating manufacturers appear alphabetically by company name and their full names, addresses and gas range trade names are listed on the back page for convenience in writing for catalogues and prices.

A special feature of the 1955 chart is an insert which provides information concerning colors available in the various gas range lines.

Ceremony commemorates Seattle Gas Company safety record

A SAFETY RECORD of more than one million man hours without a lost time accident has been established by the distribution department of the Seattle Gas Company.

The record of the 135-man department was commemorated in a ceremony Tuesday morning before work began, with many new members of the company's "1,000 Club" welcomed into the group. The club is composed of Seattle Gas employees who have worked more than 1,000 days without a lost time accident.

Walter S. Byrne, company president, praised the men for their record. The department reached the million man hour mark May 8.

Avery Willis, safety director of Seattle Gas Co., said the safe operation of the department has resulted in a 75 percent decrease in its medical-aid fund rate since 1949.

Chatham Township 'Blue Flame' home features 7 uses of gas

THE SEVEN RESIDENTIAL uses of gas are displayed to advantage at New Jersey's latest "Blue Flame" home, at Rolling Hill, Chatham Township, a territory served by Public Service Electric and Gas Co., Newark.

This Rolling Hill home is the second "Blue Flame" home in the area. The *Newark Sunday News* carried a full-color supplement portraying the house, as did the *Sunday New York Times* for the area's first "Blue Flame" home. The seven-room, split-level brick house, designed by William Chirgotis, is situated on a half-acre plot in a suburb.

The many visitors touring the $36,900 house saw all-gas appliances including a Roper built-in range, Hamilton dryer, Caloric disposer, Rheem water heater, and Servel refrigerator and air conditioner.

Calling card

Sorry I Missed You!
I wanted to talk to you about your new GAS appliance and see that everything is in good working order.
If you have any questions, now or later, please call our office, and I'll come back.
Home Service Department
CAMBRIDGE GAS LIGHT COMPANY
UN 4-3100
Extension 265

Eye-catching calling cards of the home service department, Cambridge Gas Light Co., are attached to a customer's doorknob as a pleasant way of saying "Sorry I Missed You." Similar flame-shaped cards with sales messages are distributed at bill-paying stations, enclosed with requested recipes

GAMA recommends shows for exhibitions

PARTICIPATION in one or more of 16 different national and regional trade shows has been recommended by the various divisions of the Gas Appliance Manufacturers Association, according to H. Leigh Whitelaw, managing director.

Mr. Whitelaw stressed that these are recommendations made by individual division trade show committees, which investigated various shows and recommended only those of particular benefit to the members of their divisions. This is in line with the policy of the board of directors of GAMA to allow the individual divisions to investigate and recommend to their members those national trade shows in which it is believed such members might find it profitable to exhibit.

The directors believe that state and local shows should be left to dealers. Manufacturers may lend display equipment for those shows when practicable.

The following are the recommendations:

The LPGA National Show will feature exhibits by the domestic gas range, automatic controls, gas refrigerator, gas clothes dryer, gas water heater, direct heating equipment, and vented recessed heater and floor furnace divisions.

GAMA exhibits at the National Association of Home Builders Convention and Exposition at Chicago will be displayed by the domestic gas range, gas refrigerator, gas clothes dryer, gas water heater, direct heating equipment, gas boiler, vented recessed heater and floor furnace, and gas appliance regulator divisions.

The International Heating and Ventilating Show will display products of the automatic controls, direct heating and equipment, gas boiler, relief valve and gas furnace and conversion burner divisions, while the National Plumbing and Heating Exposition will have displays of the gas water heater, gas boiler, and relief valve divisions.

The gas meter and regulator division will exhibit at the American Gas Association Distribution Conference, and industrial gas equipment division at the National Metal Exposition. The hotel, restaurant, and commercial gas equipment division will offer displays at the National Restaurant Show, National Hotel Exposition, American Dietetic Association Show, and New England Hotel and Restaurant Show.

Other divisions and the shows they have selected are: domestic gas range—American Furniture Mart, Western Furniture Mart; automatic controls—Air Conditioning and Refrigeration Institute, Institute of Appliance Manufacturers; gas refrigerator—National Food and Women's Page Editors of Metropolitan Daily Newspapers convention, American Furniture Mart; and gas clothes dryer—National Housing Center, at Washington.

Houston Natural names Smith board chairman, Wimberly president

Frank C. Smith

John H. Wimberly

FRANK C. SMITH, president of Houston Natural Gas Corporation for 22 years, was elevated to chairman of the board last month, following the quarterly meeting of directors. He succeeds the late L. S. Zimmerman.

John H. Wimberly, executive vice-president, becomes Houston Natural's president, climaxing a quarter-century of continuous employment with the company. Attorney Cecil E. Burney was elected a director of the firm.

Mr. Smith, past president of the American Gas Association and Southern Gas Association, has been extremely active in A. G. A. affairs during the last 25 years. Some of the many positions he has held are: Executive Committee member, Managing Committee member, PAR Committee vice-chairman, and General Promotional Planning Committee chairman. During his years as president of Houston Natural, the number of customers has increased sevenfold.

Mr. Wimberly, an A. G. A. member, holds a B.B.A. degree from the University of Texas, and is active in business, civic, and church affairs. In 1952 he received gas-industry recognition by being elected president of the 14-state Southern Gas Association.

Whitson succeeds Smith as Texas Illinois field superintendent

M. M. WHITSON, former assistant superintendent of pipelines, Texas Illinois Natural Gas Pipeline Co., Chicago, has been promoted to field superintendent of pipelines, to fill the vacancy created by the retirement of H. E. Smith.

Mr. Whitson started work with Natural Gas Pipeline Company of America, a companion firm of Texas Illinois, in 1931. He has served as maintenance foreman, pipe inspector, district pipeline superintendent, and assistant field superintendent. His office will be in Malvern, Arkansas.

Mr. Smith, a civil engineering graduate of the University of Nebraska, also started with Natural Gas Pipeline Company of America in 1931. He has served in several inspective and supervisory capacities for Texas Illinois.

Newbery wins Shipman Award at NAPA banquet

BEN R. NEWBERY, director of purchases and materials, Lone Star Gas Co., Dallas, has received the 1955 Shipman Award from the National Association of Purchasing Agents for outstanding services to the purchasing field over an extended period. The presentation was made at the NAPA convention banquet in New York.

Mr. Newbery, former NAPA president, is a veteran of the purchasing field. In 1915 he started with Lone Star's purchasing department when general headquarters were in Fort Worth. He moved to Dallas with the company in 1919 and shortly thereafter was appointed purchasing agent, following a brief term as "acting" purchasing agent. He was appointed to his present position in 1943. He is a member of American Gas Association.

Elect William W. Babcock vice-president of Central Illinois

WILLIAM W. BABCOCK has been elected a vice-president of Central Illinois Light Co., Peoria, Illinois.

Mr. Babcock, who has been associated with the company for 23 years, was assistant to Vice-President Roy K. Dallas, who was in charge of sales, public relations and rates. Mr. Dallas is now vice-president in charge of rate research.

Mr. Babcock joined the company in May 1932 as efficiency engineer at the Liberty Street power and heating plant, Peoria, and his succeeding duties included assistant operating mechanical engineer.

In 1940 he was named superintendent of power and occupied this position until transferred to his recently held responsibilities in 1951.

Phyllis Kilkenny accepts A.G.A. domestic publicity post

MRS. PHYLLIS D. KILKENNY joined the Public Information Bureau of American Gas Association on June 1 as domestic gas publicity writer. She will produce and distribute stories on domestic gas utilization for local company use, contact and service national magazines, and prepare press kits and publicity support for national promotional campaigns under the A. G. A. PAR Program.

Formerly assistant editor of the Wilmington (Mass.) *Crusader,* Mrs. Kilkenny has an extensive background in publicity, sales promotion and industrial relations. She is a graduate of Columbia University School of Journalism, and has worked in the public relations departments of Pan American World Airways, American Airlines, Dewey-Almy Chemical Co., and WRIB and WJAR-TV.

New Jersey Natural advances LaRue

DAVID J. LARUE has been appointed general superintendent of distribution for the Bay, Central, and Ocean Divisions of the New Jersey Natural Gas Co., Asbury Park.

The new post was created to centralize the distribution of gas in the three divisions. The contiguous divisions cover Monmouth and Ocean Counties and part of Middlesex.

Mr. LaRue has been superintendent of distribution in the central division for the past year and previous to that held the same position in the company's bay division. He has been in the gas business for 24 years, having joined the County Gas Company, in 1931.

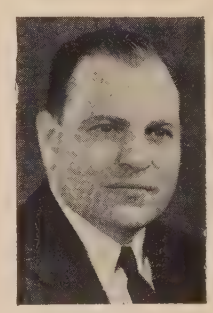
Columbia Gas appoints Scanlon vice-president

JAMES A. SCANLON, vice-president and member of the board of directors, Ohio Fuel Gas Co., has been appointed vice-president of the Columbia Gas System Service Corp., New York, the parent organization of Ohio Fuel. He will assume his new duties on July 1.

Mr. Scanlon started with Ohio Fuel Gas Company three decades ago, was made manager of the rate department in 1932, assistant treasurer in 1944, assistant secretary in 1947, treasurer in 1950, and vice-president in charge of rates in 1952. He was elected to the board of directors three years ago. Mr. Scanlon is a member of A. G. A.

Matarese president

A. D. MATARESE has been elected president of Brockton Taunton Gas Co., Brockton, Massachusetts. In this position, he succeeds Isaac S. Hall, who is retiring after 28 years with the company.



A. D. Matarese

Mr. Matarese, a graduate of Massachusetts Institute of Technology, joined the company in 1927 as a cadet engineer. He became manager in 1935 and in 1948 was elected vice-president and general manager.

Michigan Consolidated names Kaiser vice-president, sales manager

THE ELECTION of Fred A. Kaiser as vice-president and sales manager of Michigan Consolidated Gas Co., Detroit, has been announced by Henry Tuttle, president of the company. Mr. Kaiser, former president of Detroit-Michigan Stove Company, will assume his duties August 1.

Mr. Kaiser had been associated with the gas industry since 1931, when he joined the Stove Company as a field salesman. He became sales manager in 1938 and assistant to the president in 1943. Mr. Kaiser was made a vice-president in 1945 and president in 1954.

Fred A. Kaiser is a trustee of the Institute of Appliance Manufacturers, a former director of the Gas Appliance Manufacturers Association and past-president of the Detroit Sales Executives Club.

An A. G. A. member, he was elected to the "Hall of Flame" of the commercial section of the American Gas Association.

Safety course

(Continued from page 24)

never a dull moment, and secondly because it really opened my eyes." He later wrote, "The results to date cannot be properly measured in an accident frequency percentage, but it has done this—created greater interest through employee participation in safety meetings. I hope that through this participation we can show that there is a right way to do our work and that we want it done no other way."

Indicative of the course's value and effective presentation are remarks by APC members who have served as instructors. Without exception, they commented on how smoothly everything went and how effectively the four instructors collaborated in the presentation of course topics. A. L. Dowden, Liberty Mutual Insurance Co., had this to say: "I think that the course was extremely well organized down to the very last detail."

Ernie Beaumont, after participating as instructor in two courses, said, "May I sum it up by saying that in my opinion the A. G. A. safety course, 'Accident Prevention through Informed Supervision,' presents the subject thoroughly, informatively and with such interest that the supervisory participants are stimulated to more enthusiastic participation in their local safety programs."

Equity funds

(Continued from page 19)

tween the several utility services.

There are some distinct differences between pipeline companies and all other gas companies with respect to the source and application of funds. Pipeline companies were able to generate internally far less of their financial requirements, with depreciation accruals and retained income totalling only 17 percent of all funds needed during the period. Many of these companies were organized since World War II, and were forced to depend exclusively upon outside sources for their initial requirements. Companies engaged in the distribution of gas obtained 24 percent of their funds from internal sources between 1946 and 1953.

The relative reliance upon equity and debt capital was substantially the same for both types of companies. Twenty-one percent of the dollar value of all new securities issued by pipeline companies, and by distributing companies, represented equity issues.

The proportion of pipeline funds applied to new construction equaled more than 70¢ of every dollar. On the other hand, distributing companies used slightly less than two-thirds of their funds for new construction, while more than one quarter was used for retiring or refunding of existing securities.

Link Canada-U.S.

(Continued from page 11)

minion have not yet been touched.

Ten years ago proved recoverable reserves of natural gas in the U.S. were reported at about 143 trillion cubic feet. Since that time some 67 trillion cubic feet of natural gas have been produced in the U.S. Yet today's estimate of proved recoverable reserves of natural gas near 212 trillion cubic feet.

I believe that new discoveries and further exploration in Canada will result in a substantial increase in natural gas reserves in the Dominion. This has always been a pioneering country. It is a young country that is still pushing back frontiers and expanding its horizon. I know that it will find resources needed to keep pace with the unlimited progress ahead.

A recent article in one of our good trade publications was titled "Canada's Future Will Dwarf Her Past." The article pointed out that Canada needs the energy provided in its oil and gas. She needs it to power her growing industrial development. She needs it for transportation and for agriculture.

I feel sure that the gas industry in Canada will help solve some of these needs. For ours is an alert industry, an industry that is fully awakened to its problems and its needs. This is true on both sides of the theoretical border that binds, rather than separates our nations. And because we are united in facing those problems and in trying to find their solution, I am sure that the progress of our industry on this continent is truly assured. We cannot fail.

IGU conference

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Brooklyn Union Gas Co., and a formal banquet and entertainment also are included in Wednesday's program.

Thursday's session will be devoted to educational subjects and reports on requirements for international standards for gas appliances and on gas conditioning. Colonel Rockwell will deliver a formal address to close the business meeting. Thursday afternoon will be given over to a visit to United Nations.

On Friday a field trip to the Harrison (New Jersey) plant of the Public Service Electric and Gas Company is scheduled.

The Committee on Arrangements also has compiled a list of suggested tours covering points of interest in the United States and Canada both before and after the conference.

Complete details of the Conference, including speakers and their topics, are in the preliminary program, which may be obtained from A. G. A. headquarters. Also available is an order form for those persons wishing to obtain an advance set of papers.

A.G.A. convention

(Continued from page 7)

The Residential Gas Section and the Industrial and Commercial Gas Section will sponsor a joint luncheon on Monday. C. S. Stackpole, managing director of A. G. A., will welcome guests and a speaker will speak on the PAR program and Gas Industry Development program.

On Tuesday afternoon the Residential Section will present a program devoted to sales problems of the industry and possible solutions. A new colored motion picture on New Freedom Gas

Kitchen and Laundry sales will be shown. The president of Gas Appliance Manufacturers Association will address the meeting and an executive of Servel, Inc., will present the Servel Gas Refrigerator Awards. Walter H. Kurdelski, Michigan Consolidated Gas Co., chairman of the Residential Gas Section, will preside.

The Industrial and Commercial Gas Section, with Ray Trowbridge, Seattle Gas Co., as chairman, will present qualified speakers on timely subjects covering both the industrial and commercial phases of the gas business. The officers of the Section will be elected at a meeting following the joint luncheon on Monday.

The Operating Section will hold two afternoon meetings at the Biltmore Hotel, Walter H. Davidson, Transcontinental Gas Pipeline Corp., chairman of the Operating Section, will preside.

Eight papers have been chosen tentatively for the Section's program. Guy Corfield, Southern California Gas Co., will discuss what the corrosion engineer can do for management. An outside speaker will talk on the economic aspect of gas distribution. C. J. Sandusky, Southern California Gas Co., will speak on quality control. Remote control equipment will be described by a competent authority.

Safety programs and why they sometimes fail will be a topic at the meeting Tuesday afternoon. Underground storage is another subject, as is the value of engineering. Hall M. Henry, NEGEA Service Corp., will speak on peak shaving measures.

William B. Tippy, president, Commonwealth Services, Inc., is head of a committee arranging the program for the General Management Section. A luncheon meeting will be held at the Statler Hotel on Monday with Larry Shomaker, Northern Natural Gas Co., presiding as Section chairman. Speakers will be listed to talk on subjects pertaining to general management.

The A. G. A. and the PCGA insurance committees will hold a joint meeting. The Accident Prevention Committee will sponsor presentation of Safety Achievement Awards at a general sessions meeting. The Corporate Secretaries group will hear Emmet J. Leahy, of New York talk on paperwork management. George Harding, secretary, Pacific Telephone and Telegraph Co., and president, American Society of Corporate Secretaries, will be a guest at the meeting.

Mr. Blackburn, on behalf of the General Convention Committee, said that the local subcommittees were doing a most effective job in handling the wide variety of details necessary for a good convention. The result of this fine work is showing in the great number of advance registrations, which now total more than 1,850.

Members of both associations planning to attend the convention, who have not already done so, are urged to mail applications for accommodations as soon as possible to the A. G. A. Housing Committee, Convention Bureau, Los Angeles Chamber of Commerce, 1151 South Broadway, Los Angeles 15, Calif. If cancellations of advance registrations are necessary, the Committee also asks prompt notification to that effect.

Production meet

(Continued from page 33)

cleaning of gas lines. L. B. Wilson, Dowell, Inc., and Vincent Bowes, Oakite Products, read papers on the same subject.

Samuel Cohn, The Peoples Gas Light and Coke Company, presided at a Chemical and Engineering session on Wednesday morning which was largely devoted to odor conditioning and odor control. At a Manufactured Gas Production session led by John L. Turnan, Worcester (Mass.) Gas Light Co., subjects pertaining to production of high Btu oil gas were discussed. This conference was extended through the afternoon with W. J. Thiel, Battle Creek Gas Co., as chairman.

Charles Koons, Koppers Co., presided at a luncheon conference on plant waste disposal, and William H. Kramer, Phillips Petroleum Company, and Edward D. Crouch, Long Island Lighting Co., headed a luncheon meeting on use and handling of LP gases.

Accident rate

(Continued from page 15)

0.81 accidents, respectively. For the industry as a whole, the frequency of motor vehicle accidents dropped 8.1 percent from 1953 to 1.47 accidents per 100,000 miles last year.

Injuries continued to be concentrated among a minority of companies during 1954. One-third of the companies had three-fourths of the injuries. Among very large natural gas companies, those companies with accident frequency rates poorer than average accounted for 72 percent of the accidents; they had an average of 81 accidents per company, while the companies with better records averaged only 24 accidents each.

Comparable analysis for other sizes of company and type of gas emphasizes the concentration of accidents among a minority of companies and points the way toward still further improvement.

Atomic age

(Continued from page 21)

systems will not be useful and valuable for a long time because of the special nature of gas as an energy source. You will almost certainly be getting a good deal of your gas from fluidization or gasification of their materials. Coal is an obvious possibility and oil shale certainly looks interesting. We are gradually finding ways to economically recover oil from the shales that contain a good part of our existing continental supply of petroleum. Gas will be an inevitable by-product of that production.

Behind the classification curtain, it is fairly common knowledge that uranium is also found with many types of shales, particularly some of the Chattanooga shales that underlie our Eastern Appalachian chain. The uranium content is quite large. At Columbia School of Engineering, we have a large project sponsored primarily by the government for the combined production of uranium and oil which, incidentally, will pull gas out of this material. Uranium has been turning up in oil fields now, in the waters used in the so-called "water flood method" of production of oil. This ties in with the natural gas business too. We should all be aware of these combined possibilities.

To go a step further, in the fluidization or gasification of materials for the production of gas, heat generated by atomic processes may prove very valuable. Atomic reactors give us the highest energy density or the highest tempera-

(Continued on next page)

tures that we can possibly achieve. The main limitation is really the materials problem, materials to hold the high energy development. In many of the largest atomic power plants, those that develop as much as 500,000 kilowatts, the heart of the unit need not be much bigger than a household refrigerator. This is a tremendous amount of energy density.

A lot of chemical companies are experimenting on the use of high level radiation as a means of producing and promoting both synthesis and decomposition. It would not be surprising to find a cross linkage here between the atomic energy field and the gas field.

In one sense you may look upon atomic energy as a competitor but this would be a short-sighted view. You gentlemen are apparently going to be able to sell all the gaseous fuels you can produce and distribute more or less indefinitely. The main point is to retain your competitive position and be able to supply enough fuel to meet the demands.

I strongly urge all of you in this industry to keep in close touch with the developments in nuclear energy. For I am sure that if any of us, in the various energy fields, sit in a corner and don't play ball with one another we may lose out. The entire field is sufficiently big so that there are plenty of glory and plenty of profits and plenty of customers to go around. Let us all make a combined attack of the very great problem of providing the total energy sources which will be required in the next ten to 50 years.

Questions and discussion

Question: Can you give us an idea as to the relationship of the power required to produce the product which, in turn, is used in a boiler for an electric power plant and the ultimate electric power that can be produced in the plant? I would also like to hear your remarks on what Dr. Sarnoff said about direct conversion of uranium into electric energy so that it can be packaged for the home.

Dr. Dunning: You start with uranium oxide, perhaps one tenth of one percent you dig out of the ground at between ten and 20 dollars per pound. Uranium metal, then, will cost 30 to 40 dollars per pound after it is refined. Then put the stuff through the gaseous diffusion process at Oak Ridge. You go through that, pay the cost of raw materials, capital investment, amortization, interest, operating and power costs and come out with materials costing about $9,000 per pound. That estimate is two years old, so I will beg the questions as to the exact cost.

Even $9,000 per pound is equal to about six dollars a ton for coal. The actual energy content of the nuclear fuel is cheaper than coal and, in most parts of the country, cheaper than natural gas.

As to the second question about direct conversion. You ask us why we go through a heat cycle to use this high-powered energy? The answer is that, although we talk about millions of volts we are speaking of tiny particles, most of which will hardly go through a piece of paper. Once you surround the material with a container the thickness of a piece of paper, that energy is all degraded into heat. Unless you work in a sort of vacuum-type thing, the energy practically all goes into heat, very high level heat.

Our whole basic problem is to get the heat out of those layers, to get materials that will take the heat. Any direct conversion, so far as we can see now, will result in only a tiny fraction of energy. I see no way at the present time except by going through the heat channel, to produce any substantial fraction of the energy.

Question: Would they put out packaged units to heat the house?

Dr. Dunning: All of the economic factors in the gas and electric industry have been on the side of central distribution. It has always been more economical in the long run to turn toward larger and larger central power stations, properly distributed. This carries over into the electric power generating field as far as atomic energy is concerned.

In the gas field I am a bit concerned. In atomic fission, one tenth of one percent is turned into energy and the other 99.9 percent is converted into ashes. The ashes are radioactive, the fission products are hot and furthermore they maintain their temperature so that there is a considerable amount left at the end of the year. The utilization of these hot ashes for radioactive isotopes, for cancer research is widespread, yet it is a sort of chicken feed market. When you really get into the atomic power business you are going to have radioactive ashes running out of your ears, so to speak.

I am just a little worried whether somebody isn't going to think of putting these ashes into a nice lead tank truck and drop them into one of these underground oil tanks we use for oil heating in our homes and then stick a little heat exchanger coil in that and pump it into the house.

Perhaps, however, it will be better to have a central distributing point and pipe the ashes, in the form of gas, into the home. I would be remiss if I didn't tell you of the interesting ramifications of this by-product ash situation. I would strongly advise the gas industry to be on its toes and see where it can collaborate and take a slice of this market.

Question: What would be the "package"?

Dr. Dunning: We are building package reactors now for remote areas. The logistics of it look pretty good where you don't want to carry tanks of LP-Gas or fluid or oil. Whether it will work, or how well, is uncertain. Many people dream of whole new areas of industry developing because you can send a messenger boy with the fuel instead of running a pipeline.

Rapid research and engineering and technological development are going to make our economy increasingly dynamic. However, history has shown that those who keep up with new developments somehow seem to stay in business, keep producing more and making more. I haven't any worries; it is going to be a very interesting future.

Baltimore action

(Continued from page 10)

homes—at a time when oil dealers were offering $100 and more as a trade-in on an old boiler.

The dealer contact group, which includes 12 representatives and a supervisor, contacts all dealers regularly and informs them of future promotional and advertising campaigns. Replacement of outmoded and obsolete equipment is heavily stressed in all advertising and promotional literature. Advocated particularly is the change of tank-type water heaters to automatic water heaters and the use of matchless ranges.

Other sales aids given dealers by the

dealer contact group include: names and addresses of customers who do not have gas house heating or gas automatic water heating; leads for warm air house heating installations (company sells only conversion burners and wet jobs); tie-ins with company advertising; help in making heat loss surveys; competitive fuel cost comparison data; window signs and truck signs; and the mailing of dealer circulars and other promotional material.

Company dealer contact men are familiar with and in constant contact with the various appliance financing organizations in Baltimore and acquaint all newly established dealers with the facilities available.

The company has no exclusive appliance sales franchises.

Besides a regular free appliance adjustment service, the company will also provide parts replacement at reasonable charges, where adequate service by other parties is not provided. On new home construction, the company maintains the first year guarantee for gas house heating equipment at an established flat price to the builder or heating contractor.

No opportunity is missed in demonstrating gas appliances of the most modern design on the company's half-hour Home Service TV show and cooking schools, radio, and TV spots, and exhibits at fairs and shows.

Commercial and industrial

The Industrial Fuel Department of Baltimore Gas and Electric is responsible for developing commercial and industrial gas sales volume, and equipment sales are made principally through dealers. With a total personnel of 29, this department comprises 21 engineering representatives fully experienced in manufacturing operations and commercial installations that involve the use of heat and having a thorough knowledge of heating equipment and methods.

Among them are specialists in various fields—heat treating and metal melting; ceramics, resin and oil processing; industrial baking and drying; food processing and cooking, including kitchen layout for large volume meal production.

This department renders technical assistance in applying gas to the many diversified uses for which this fuel is eminently fitted and gives continuing service, to ensure operating economy and satisfaction, after the installation is made.

Gas for industrial heat processes is sold in Baltimore on a firm basis at a price per Btu which is above that of competitive fuels. Hence, the company's success in obtaining acceptance for this fuel —to the extent of nearly 3,000,000 cfh in connected load since 1950—reflects their program of selling gas as a utility service instead of simply a source of heat.

This has involved intensive studies of manufacturing operations and the preparation of detailed reports with recommendations for equipment, installation, and operating procedures. One of the outstanding factors in obtaining new business in large plants has been the Industrial Fuel Department's ability to prove the advantages of gas in competition with other fuels by trial installations and, in special cases, guaranteed performance.

With Bunker C and residual oils around six cents per gallon in Baltimore, it is often necessary to find better ways and improved types of equipment to utilize gas. It is also necessary for the Industrial Fuel engineering representatives to work with customers' representatives in effecting and maintaining maximum quality and quantity of product, and to obtain agreement by the customer that these results are due to the use of gas fuel as sold and serviced by the company.

In the last two years, brick kilns, smelters, glass tanks, enameling and heat treating plants, and numerous other industrial operations have been converted to gas from oil to coke, and proved to result in more efficient operation.

Every new operation proposing to use heavy oil receives careful study to determine whether advantages in quality and quantity of product could be obtained by using gas, and there is an increasing willingness on the part of such concerns to give gas fuel full consideration.

Sales of gas for space heating of shopping centers, warehouses, and commercial establishments continue to grow even though gas is a substantially premium fuel compared to No. 4 and No. 5 oil, and is slightly higher in fuel cost alone than No. 2 oil.

The company participates locally in A. G. A. Commercial Gas Water Heater Campaigns. In the last such campaign, the department had full page advertisements in *Baltimore Real Estate and Building News* and *Baltimore,* and also had a series of direct mailings to 2,000 restaurants and food service establishments, 500 drug stores, 1,800 taverns, 4,000 shops, factories and industrial plants, and 500 builders, architects and engineers.

This advertising carried the following statements: "Your contractor or equipment dealer can give you valuable help in planning an installation that will provide efficient hot water service. Or, if you have any questions about size, design, or operating quality, we will be glad to have our Industrial Fuel engineer look into your requirements and submit recommendations you can use as a guide in getting the best installation for your needs."

Gas is used almost exclusively for major cooking operations in food service establishments in the Baltimore area. In this field the company, for several years, has been utilizing *Cooking for Profit* which carries on the back cover their own advertisement. The continued theme of these advertisements relates to the advantages of the modern types of commercial cooking equipment and the benefits to the user of replacing obsolete units. Local participation in the A. G. A. Commercial Gas Cooking Campaign is carried on to some extent, although some of the A. G. A. material is replaced with locally produced advertising.

Offers proof

Baltimore Gas and Electric is proving that a combination company can use the Action Program for Gas Industry Development as well as a straight gas company. In fact, certain advantages can be obtained by promoting gas appliances along with non-competitive electric equipment.

What the Baltimore company, as well as any combination company, cannot do is to allow anything that is detrimental to either fuel to be advertised or promoted in its name. This is one reason that Baltimore Gas and Electric has been unable at times to use some PAR promotional and advertising material.

The management of the Baltimore company feels that it has an obligation to all its customers in serving *both* fuels efficiently, *as well as* an obligation to its stockholders to give them the highest allowable rate of return for each fuel's operations. In keeping with these obligations the company is vigorously promoting gas house heating, automatic gas water heating, and matchless gas ranges because it is convinced that these are in the best interests of its customers as well as the company.

New A.G.A. members

Gas Companies

Florida Home Gas Co., DeLand, Fla. (A. H. Gaede, Pres.)

Manufacturer Companies

The Aerotec Corp., Greenwich, Conn. (John E. Mullaney)
Cam-Stat, Inc., Los Angeles, Calif. (Roland D. Whitlock, Treas.-Gen. Mgr.)
Configured Tube Products Co., Bellwood, Ill. (Fred D. Fisher, Pres.)
Given Manufacturing Co., Los Angeles, Calif. (Bertram Given, Exec. Vice Pres.)
Gordon & Piatt, Inc., Winfield, Kan. (S. Andrew Swoyer, Vice-Pres.)
Prat-Daniel Corp., South Norwalk, Conn. (Conrad H. Pinches, Exec. Vice-Pres.)
Smith-Blair, Inc., South San Francisco, Calif. (Luther L. Smith)
Triad Products Corp., Chicago, Ill. (R. L. Geaslen, Pres.)
John Wood Co., Ltd., Toronto, Ont., Can. (R. C. Wheeler, Product Engr.)

Individual Members

Leo Albert, Koppers Co., Inc., Metal Products Div., Baltimore, Md.
Robert H. Anderson, North Eastern Gas Board, Bradford, Eng.
U. H. Anslinger, Servel, Inc., Dallas, Tex.
Hugh W. Baird, Standard Pipe Protection Inc., St. Louis, Mo.
Walter M. Baldwin, City of St. Petersburg, Div. of Gas, St. Petersburg, Fla.
Marco P. Barbarin, Dowell Inc., New York, N. Y.
Edward F. Barrett, The Peoples Gas Light & Coke Co., Chicago, Ill.
Arthur Bettauer, Price Waterhouse & Co., New York, N. Y.
R. F. Boli, Carnegie Natural Gas Co., Pittsburgh, Pa.
Alvin R. Booth, Ray D. Baker Contractor, Inc., Detroit, Mich.
E. W. Bradley, Jr., Philadelphia Gas Works Div., U.G.I., Philadelphia, Pa.
Fred J. Breinlinger, Long Island Lighting Co., Far Rockaway, N. Y.
W. Saurin Brooke, Public Utilities Commission of the City of Kingston, Ont., Can.
Emagene Burge, United Gas Corp., Shreveport, La.
John J. Burns, The Peoples Natural Gas Co., Pittsburgh, Pa.
Roy F. Carter, Servel, Inc., Memphis, Tenn.
P. E. Chamberlin, Servel, Inc., Kansas City, Mo.
Earl P. Christensen, Price Waterhouse & Co., Detroit, Mich.
Howard P. Conrad, Southeastern Michigan Gas Co., Port Huron, Mich.
Raymond B. Cooper, Servel, Inc., Evansville, Ind.
Nelson E. Davenport, Rockwell Mfg. Co., Pittsburgh, Pa.
George R. Davis, Public Utilities Commission of the City of Kingston, Ont., Can.
William W. Devore, Pennsylvania Gas Management Co., Tamaqua, Pa.
J. Kenneth Fee, Public Utilities Commission of the City of Kingston, Ont., Can.
W. Chester Fitch, Gannett Fleming Corddry & Carpenter, Inc., Harrisburg, Pa.
Jack E. Fleisch, Ruthrauff & Ryan, Inc., Chicago, Ill.
Howard E. Ford, Northern Illinois Gas Co., Bellwood, Ill.
Byron E. Francis, Northern Natural Gas Co., Omaha, Neb.
George G. Fredholm, Northern Illinois Gas Co., Aurora, Ill.
Wayne C. Gracey, The Peoples Gas Light & Coke Co., Chicago, Ill.
George L. Grantham, Fort Hill Natural Gas Authority, Easley, S. C.
F. A. Grossmann, Servel, Inc., Needham, Mass.
Ralph C. Gustafson, Northern Illinois Gas Co., Aurora, Ill.
Robert F. Hagemann, Jr., Southeastern Michigan Gas Co., Port Huron, Mich.
George W. Hartung, The Peoples Natural Gas Co., Pittsburgh, Pa.
William F. Hayes, Northern Illinois Gas Co., Aurora, Ill.
Otto H. Hegemann, City Public Service Board, San Antonio, Tex.
Charles L. Heron, The Peoples Natural Gas Co., Pittsburgh, Pa.
Dillon B. Herzer, Southeastern Michigan Gas Co., Algonac, Mich.
Robert A. Himmelmann, The Peoples Gas Light & Coke Co., Chicago, Ill.
Charles V. Hoey, The Peoples Natural Gas Co., Pittsburgh, Pa.
A. L. Hospers, Servel, Inc., Columbus, Ohio
Heard W. Hyslop, United Gas & Fuel Co. of Hamilton, Ltd., Hamilton, Ont., Can.
Robert L. Ingeman, The Peoples Gas Light & Coke Co., Chicago, Ill.
Charles L. Jewett, Arthur D. Little, Inc., Cambridge, Mass.
Sanfred N. Jumisko, Northern Illinois Gas Co., Aurora, Ill.
Thomas A. Keeley, The Peoples Gas Light & Coke Co., Chicago, Ill.
Wallace F. Kienast, Montana-Dakota Utilities Co., Glendive, Mont.
George M. Kick, The Brooklyn Union Gas Co., Brooklyn, N. Y.
R. L. Kirse, Jr., Servel, Inc., Evansville, Ind.
Joseph A. Knell, Koppers, Inc., Metal Products Div., Baltimore, Md.
G. O. Kuhen, Servel, Inc., Evansville, Ind.
Harold J. Latham, The Peoples Gas Light & Coke Co., Chicago, Ill.
Harry S. Littman, Attorney-at-Law, Washington, D. C.
Ross O. Lobaugh, The Peoples Natural Gas Co., Pittsburgh, Pa.
Leroy G. Malloch, United Gas Corp., Jacksonville, Tex.
George M. McClure, Battelle Memorial Institute, Columbus, Ohio
Thomas T. McEldowney, Northern Illinois Gas Co., Aurora, Ill.
Arthur G. Merkel, Northern Illinois Gas Co., Aurora, Ill.
William D. Metcalf, Northern Illinois Gas Co., Aurora, Ill.
Charles D. Mitchell, American Meter Co., Boston, Mass.
Charles Mullen, Niagara Mohawk Power Corp., Syracuse, N. Y.
Hugh R. Murphy, The Peoples Gas Light & Coke Co., Chicago, Ill.
Joseph R. Nardielle, The Peoples Gas Light & Coke Co., Chicago, Ill.
Walter T. Neveu, The Peoples Gas Light & Coke Co., Chicago, Ill.
W. R. Penn, Servel, Inc., Dallas, Tex.
Chester H. Petersen, New Jersey Natural Gas Co., Toms River, N. J.
Walter O. Peterson, Northern Illinois Gas Co., Aurora, Ill.
Dale C. Popp, Uservco, Inc., Jackson, Mich.
John G. Reinke, Jr., The Peoples Gas Light & Coke Co., Chicago, Ill.
Harold P. Risley, Public Service Co. of Colo., Denver, Colo.
Lee Sanders, Servel, Inc., Dallas, Tex.
R. P. Schenk, Servel, Inc., Chicago, Ill.
Raymond F. Schuessler, Northern Illinois Gas Co., Bellwood, Ill.
John C. Simmons, Ruthrauff & Ryan, Inc., Dallas, Tex.
Glenn D. Smith, Hope Natural Gas Co., Parkersburg, W. Va.
James H. Smith, Fort Hill Natural Gas Authority, Easley, S. C.
Lawrence R. Snyder, Hope Natural Gas Co., Morgantown, W. Va.
J. F. Surbeck, Servel, Inc., McLean, Va.
C. MacDonald Swan, Pennsylvania & Southern Gas Co., Philadelphia, Pa.
D. Ben Taliaferro, Bureau of Mines, Bartlesville, Okla.
Hilliard S. Thurber, Long Island Lighting Co., Garden City, N. Y.
Kenneth A. Tobias, Rheem Manufacturing Co., Chicago, Ill.
Earl L. Tornquist, Northern Illinois Gas Co., Bellwood, Ill.
J. M. Townsend, Servel, Inc., Chicago, Ill.
Loren W. Tuttle, Northern Illinois Gas Co., Bellwood, Ill.
Clarence G. Van Note, Public Service Electric & Gas Co., Newark, N. J.
John H. Wall, Servel, Inc., Evansville, Ind.
Jack H. Walters, Rockwell Mfg. Co., Pittsburgh, Pa.
Arthur R. Ward, Hope Natural Gas Co., Fairmont, W. Va.
Lewis R. Warmington, The Peoples Gas Light & Coke Co., Chicago, Ill.
John E. Wills, Northern Illinois Gas Co., Bellwood, Ill.
Frank Wright, Servel, Inc., Dallas, Tex.
Lester W. Wuellner, Southeastern Michigan Gas Co., Port Huron, Mich.
J. O. Yund, Servel, Inc., Evansville, Ind.

Test materials

(Continued from page 20)

used materials that may be suitable for pilot burner construction. In addition, accelerated pilot studies using a wide variety of gas conditions and studies of the formation of deposits within metal tubes of different composition at elevated temperatures with various test gases flowing through the tubes were performed.

Experiments were made with copper, aluminum, 18-8 chrome nickel stainless steel, nickel-free stainless steel, copper-

clad steel, tinned steel and sulphur free yellow brass tubing to observe at what temperature deposits would start to form on the metal surface in contact with flowing fuel gas.

Studies of both non-primary aerated pilot burners and single port pilot burners in conjunction with automatic pilots devices were also made in an effort to expand upon the information necessary to adapt these types of pilots to contemporary gas-fired equipment. Additional studies were performed on low Btu pilot burners, on the order of 50 Btu per hour gas input rate.

Copies of Research Bulletin No. 69, authored by James C. Griffiths of the Laboratories staff, are available at $1.00 each from the Association's Headquarters or the A. G. A. Laboratories.

Sell a service

(Continued from page 30)

about double the customer's cost of the fuel which is to be displaced. Or when I learn that they have sold nearly $300,000 worth of gas to a glass factory in displacement of bituminous coal, again at a much higher price per million Btu. Or more than $200,000 worth of gas to a brick manufacturing company, displacing #4 and #6 oil. These men are selling, not just a quantity of Btu but a service.

In order to sell that service, they have to know what it is capable of doing and they have to know enough about the customer's operations to be able to show him how gas can be used and what it will do for him. Often they have to assist in the design of equipment. That is real salesmanship, the kind for which the members of this Industrial and Commercial Gas Section are justly famous.

I should like to be able to say to you that every gas utility company in the U.S. is as much interested as I am in the sale of firm gas for those industrial processes which require continuity of supply. Most of them are. I trust that the day will come when all of them are. But there are serious obstacles which stand in the way.

Perhaps the greatest obstacle is the failure of some top executives in the industry to realize what profits are available in the sale of gas at prices which reflect its value as a service, rather than its cost as a fuel.

The attitude of regulatory bodies, the inflexibility of some of them in their rate making policies, their insistence that gas rates be based on cost rather than value of service, the restrictions imposed by the laws of several states, the necessity in some cases of making substantial investments in peak-shaving or supplemental plant capacity to firm up natural gas supplies, are additional obstacles.

It would be easy to let these obstacles discourage us. But discouragement is not the mark of salesmen such as you, nor is it the watchword of the Giddyap Program. No obstacle is insurmountable. If the long term competitive strength of the gas industry depends upon a general recognition that gas is not just a fuel but a valuable service, then it is our job to bring about that recognition.

And if the chief executives of the companies which some of you represent haven't seen the light as yet, then I must say that you have been wasting your salesmanship on your customers when you should have been using it on your bosses. As salesmen it is your job to know your market, but it is just as much your job to give the chief executives of your companies an understanding of that market and its true relationship to the service you have to sell.

PR ad

(Continued from page 17)

corporate the suggestions and comments of the 19-man A. G. A. Public Information Projects Committee headed by Harold E. Eckes, director, Public Relations and Marketing Research, The East Ohio Gas Co., Cleveland. Each ad features jobs and functions common to all gas companies and copy treatment designed for easy adaptation to local situations and individual company policies.

The series was prepared for the A. G. A. Public Information Bureau by Bozell & Jacobs, Inc., New York, PR counsel. Two sizes of mats, four column by 12 inches, and three column by ten inches, will be made available to member companies at mat and reprint costs only. Suggested uses include daily and weekly newspapers and gas company publications.

Later ads in the series will dramatize the role of the gas industry's appliance testing and approval program and other phases of gas company activity under the free enterprise system.

1955

JULY

11-15 •National Housewares & Home Appliance Exhibits, Convention Hall, Atlantic City, N. J.

AUGUST

1-3 •American Trade Association Executives, Grand Hotel, Mackinac Island, Mich.

SEPTEMBER

9 •New Jersey Gas Association, Hotel Monmouth, Spring Lake, N. J.

11-13 •Independent Natural Gas Association of America, Jasper National Park, Canada

14-15 •Seventh Annual A.G.A. Accident Prevention Conference, Little Rock, Ark.

25-30 •International Gas Union Sixth Conference, Hotel New Yorker, New York

OCTOBER

12-14 •GAMA Annual Meeting, El Mirador Hotel, Palm Springs, Calif.

17-19 •A.G.A. and Pacific Coast Gas Association Convention, Los Angeles, Calif.

17-21 •National Metal Exposition, Philadelphia, Pa.

18-21 •The American Dietetic Association, St. Louis, Mo.

18-22 •National Safety Congress and Exposition of National Safety Council, Chicago, Ill.

24-26 •American Standards Association, Sheraton Park Hotel, Washington, D. C.

24-26 •Pacific Coast Regional Restaurant Convention and Exposition, Biltmore Hotel, Los Angeles, Calif.

24-26 •Sixth National ASME Conference on Standards, Washington, D. C.

24-27 •National Association of Railroad & Utilities Commissioners, Asheville, N. C.

NOVEMBER

2-3 •American Home Laundry Manufacturers Association, The Palace Hotel, San Francisco, Calif.

6-9 •Controllers Institute of America, Hotel Statler, Los Angeles, Calif.

13-18 •ASME, Congress and Hilton Hotels, Chicago, Ill.

16-18 •Southeastern Gas Association, Roanoke Hotel, Roanoke, Va.

1956

JANUARY

23-24 •Industrial Heating Equipment Association, La Salle Hotel, Chicago, Ill.

Personnel service

SERVICES OFFERED

Management Engineer—eight years' experience with medium size midwest gas utility in all phases of operations and engineering, both technical and administrative, during manufactured gas, changeover, and natural gas periods. Engineering degree and registered professional engineer. Desires greater responsibility and opportunity in expanding company. **1808.**

Market Analyst-Economist—available for gas utility or gas transmission company. Columbia University Ph.D. (Economics) degree. Participated in Executive Development Program of major gas utility company; former marketing management consultant. Familiar with statistical techniques, public regulation, and sales promotion. Married. (34) Salary requirement: $700 monthly. **1809.**

Engineer—graduate, with extensive experience in design, development and production of gas appliances, much of it at a supervisory level, is interested in a new connection. Resume available. **1810.**

Sales Executive—successful experience, and broad, mature background with leading appliance manufacturers. Close personal acquaintance with leading U.S. and Canadian distributors, and U.S. mail order houses and chain store buyers. Has hired, trained, and supervised factory sales organizations and national groups of manufacturers' representatives. Excellent working knowledge of manufacturing and advertising. Fitted for top level responsibilities in sales department of manufacturer, utility, or large retail store appliance operation. **1811.**

Gas Sales Engineer—experienced in industrial sales engineering, residential and commercial heating, water heating and domestic appliances. Knowledge of sales procedure in both large and small utility companies, natural, manufactured and LP-Gases. Can relocate. **1812.**

Manufacturers' Representative—since 1938, wants gas appliance line for California headquarters Los Angeles. Residential, commercial and industrial experience. **1813.**

POSITIONS OPEN

Gas Engineer—Connecticut utility requires young gas engineer capable of taking over as assistant superintendent of department handling production, distribution, meters and customers service. Prefer under 35 with technical background and some experience in one or more of above operations. For properly qualified man this is a permanent, pleasant and well-paid position. Reply stating age, experience, education and personal particulars. **0769.**

Natural Gas Engineer—for research on productivity of natural gas wells in the Mid-Continent area. Work involves the basic theory of fluid flow. Experience required in well testing and gas measurement. Reply giving references and full details as to education, professional experience, and salary expected. **0770.**

Manager—for gas utility, recently converted to straight natural gas, located in Middle-Atlantic state. Approximately 6,000 meters. One of a group of jointly operated properties. Knowledge of distribution system operation and construction, sales, industrial gas utilization, and office procedure desirable. Advise full particulars about self and past experience. **0771.**

Sales Engineer—leading Midwestern valve manufacturer is searching for sales engineer to handle sales to gas appliance manufacturers. Knowledge of gas advantageous, however, not absolutely necessary. Opportunity for advancement assured for right man. Please state qualifications and salary expected. **0772.**

Salesman—permanent position with natural gas utility serving approximately 2,400 gas meters located in western Kentucky. Must have at least a high school degree and approximately 15 years' experience in advertising and selling gas and appliances. Must be qualified to evaluate industrial, commercial and residential size heating, ventilating and other services equipment and installations, and make cost analyses thereof. Remuneration based upon salary and commissions on sales of appliances and gas. **0773.**

Sales Manager—Pennsylvania merchandising utility has opening for division sales manager. Please reply in writing, giving complete resumé. **0774.**

Commercial Sales Supervisor—merchandising utility wants commercial sales supervisor. Salary and override. Give complete details. Applications will be held in confidence. **0775.**

Test Engineer—large eastern gas utility desires services of an engineer experienced in appliance testing. Knowledge of mixed gas and familiarity with A. G. A. requirements preferred. Reply giving age, education and experience. **0776.**

Gas Appliance Development Engineer—experienced in A. G. A. testing procedure on central heating. Mechanically inclined and capable of making necessary changes desirable. Submit resumé. Bay area, California. **0777.**

Assistant Manager, Gas Operations—Established company serving about 80,000 gas customers wants qualified man 35-40 years as assistant to man in charge of gas operations. Advancement to top position in 2 or 3 years assured for right man. Must have broad experience in gas operations, and qualified to handle distribution, sales, and pricing problems. Salary $10,000 to $15,000. Give complete information, education, experience, background and other qualifications, send recent photograph. **0778.**

Industrial Sales Engineer—Assistant to sales manager prominent Connecticut manufacturer, experienced in application, sale and servicing of industrial furnaces, ovens and controls; requires versatile man who can write proposals, sell and service standard equipment. Send brief resume including salary requirements for initial confidential consideration. **0779.**

Plant Accountant—Gas transmission company located in Rocky Mountain area requires plant accountant capable of supervising plant accounting section. Accounting degree and heavy plant accounting experience essential. Age under 40; salary open; liberal employee benefits. Submit details of qualifications and experience. **0780.**

Accounting Specialist—Accounting specialist for controller's department of natural gas transmission company located in Rocky Mountain area. CPA, accounting degree, and five years gas utility experience preferable. Age under 40; salary open; liberal employee benefits. Submit details of qualifications and experience. **0781.**

Stores Accountant—Gas transmission company located in Rocky Mountain area requires stores accountant capable of taking charge of all stores accounting and supervision of field accounting. Accounting degree and five years of utility stores accounting experience essential. Age under 40; salary open; liberal employee benefits. Submit details of qualifications and experience. **0782.**

NY-NJ meeting

(Continued from page 37)

not forgotten.

Plans for all gas companies to maintain and extend the kitchen and laundry load were discussed by Charles Bowen, manager of A. G. A. New Freedom Gas Kitchen and Laundry Bureau. He reviewed the splendid cooperation of manufacturers in this field and showed how gas companies can tie-in on the local level with national promotions in leading magazines.

Gas dryers will constitute a greater percentage of total dryer sales when more gas companies see to it that gas models are on dealers' floors, the dryer panel was told by Norman R. Millard, Bendix Home Appliance Company. First quarter figures show that New York and New Jersey lifted the gas dryer sales percentage by several figures over 1954.

Mr. Millard pointed to Atlantic City and Philadelphia as two bright spots. He attributed a healthy rise in gas dryer sales to a rental purchase plan initiated by local gas companies. Philadelphia Gas Works offers a plan whereby a prospective buyer may rent a dryer for 75 cents a week with a full year to make up his mind whether to buy or not. All rental payments apply to the price in case of purchase.

A preview of A. G. A. advertising for the coming year was given at the advertising round-table presided over by C. Fred Westin, Public Service Electric and Gas Company. Slides of fall ads were shown and a TV commercial, one of a series of six available through A. G. A., was screened.

The role of home service in making sales was the topic of a round-table led by Ruth Soule, The Brooklyn Union Gas Company.

A. J. Hartmann, Consolidated Edison of New York, succeeded Henry Rohrs as Council chairman for the coming year. Howard Niles, Public Service Electric and Gas Co., was elected vice-chairman, and Robert Denhart, Central Hudson Gas and Electric, and William Miners, New Jersey Natural Gas Co., became Council members.

The conference concluded Tuesday afternoon with a "Friendship Hour" with appliance manufacturers as hosts.

A.G.A. Advisory Council

FRANK H. ADAMS.....Toledo, Ohio
A. M. BEEBEE.....Rochester, N. Y.
N. B. BERTOLETTE.....Hartford, Conn.
EVERETT J. BOOTHBY...Washington, D. C.
E. G. BOYER.....Philadelphia, Pa.
GLENN W. CLARK...Oklahoma City, Okla.
A. W. CONOVER.....Pittsburgh, Pa.
STUART M. CROCKER....New York, N. Y.
CHARLES C. EELES.....Columbus, Ohio
PAUL E. EWERS.....Detroit, Mich.
HENRY FINK.....Detroit, Mich.
RALPH L. FLETCHER.....Providence, R. I.
J. A. FRY.....Detroit, Mich.
J. N. GREENE.....Birmingham, Ala.
C. H. GUEFFROY.....Portland, Ore.
W. G. HAMILTON, JR.....Philadelphia, Pa.
LYLE C. HARVEY.....Cleveland, Ohio
R. M. HESKETT.....Minneapolis, Minn.
FREDERICK O. HESS.....Philadelphia, Pa.
STANLEY H. HOBSON.....Rockford, Ill.
ROBERT A. HORNBY..San Francisco, Calif.
D. A. HULCY.....Dallas, Texas
F. H. LERCH, JR.....New York, N. Y.
EARLE J. MACHOLD.....Syracuse, N. Y.
N. C. McGOWEN.....Shreveport, La.
J. F. MERRIAM.....Omaha, Neb.
JAMES S. MOULTON..San Francisco, Calif.
HOWARD B. NOYES....Washington, D. C.
ROBERT W. OTTO.....St. Louis, Mo.
FREDERICK J. PFLUKE.....Rochester, N. Y.
J FRENCH ROBINSON....New York, N. Y.
LOUIS RUTHENBURG.....Evansville, Ind.
FRANK C. SMITH.....Houston, Texas
R. G. TABER.....Atlanta, Georgia
ALLYN C. TAYLOR.....Reading, Pa.
PAUL R. TAYLOR.....New York, N. Y.
TOM P. WALKER.....Houston, Texas
T. WEIR.....Chatham, Ontario
HARRY K. WRENCH....Minneapolis, Minn.
CHARLES G. YOUNG....Springfield, Mass.

PAR COMMITTEE

Chairman—C. H. Zachry, Southern Union Gas Co., Dallas, Texas

FINANCE COMMITTEE

Chairman—Ernest R. Acker, Central Hudson Gas & Electric Corp., Poughkeepsie, N. Y.

LABORATORIES MANAGING COMMITTEE

Chairman—N. B. Bertolette, The Hartford Gas Co., Hartford, Conn.

Associated organizations

GAS APPLIANCE MANUFACTURERS ASSOCIATION
Pres.—T. T. Arden, Robertshaw-Fulton Controls Co., Lynwood, Calif.
Man. Dir.—H. Leigh Whitelaw, 60 East 42nd St., New York 17, N. Y.

CANADIAN GAS ASSOCIATION
Pres.—P. W. Geldard, Consumers Gas Company of Toronto, Toronto, Ontario.
Exec. Sec.-Tr.—Warner A. Higgins, Room 804, 6 Adelaide St., E., Toronto 1, Ontario.

FLORIDA-GEORGIA GAS ASSOCIATION
Pres.—John C. Bolender, Peoples Water & Gas Co., North Miami, Fla.
Sec.-Tr.—Joseph Frink, Florida Power and Light Co., Miami, Fla.

ILLINOIS PUBLIC UTILITIES ASSOCIATION
Sec.-Tr.—T. A. Schlink, Central Illinois Light Co., Springfield, Ill.

INDIANA GAS ASSOCIATION
Pres.—A. B. Brown, Southern Indiana Gas and Electric Co., Evansville, Ind.
Sec.—V. C. Seiter, Citizens Gas and Coke Utility, Indianapolis 9, Ind.

THE MARYLAND UTILITIES ASSOCIATION
Pres.—J. Frank Blake, Jr., Conowingo Power Co., Elkton, Md.
Sec.—Robert L. Smith, 26 West Patrick St., Frederick, Md.

MICHIGAN GAS ASSOCIATION
Pres.—Roland R. Paulin, Michigan Consolidated Gas Co., Detroit, Mich.
Sec.-Tr.—M. G. Kendrick, Michigan Consolidated Gas Co., Ann Arbor, Mich.

MID-WEST GAS ASSOCIATION
Pres.—M. K. Wrench, Metropolitan Utilities District, Omaha, Neb.
Sec.-Tr.—Harold E. Peckham, Northern States Power Co., Minneapolis 2, Minn.

NATURAL GAS AND PETROLEUM ASSOCIATION OF CANADA
Pres.—T. Weir, Union Gas Company of Canada, Ltd., Chatham, Ontario.
Sec. and Asst. Tr.—S. C. Hanna, United Gas & Fuel Co. of Hamilton, Hamilton, Ontario.

NEW ENGLAND GAS ASSOCIATION
Pres.—Harold E. Ayer, Lynn Gas & Electric Co., Lynn, Mass.
Man. Dir.—Clark Belden, 10 Newbury St., Boston 16, Mass.

NEW JERSEY GAS ASSOCIATION
Pres.—H. E. Carver, City Gas Co., Maplewood, N. J.
Sec.-Tr.—Frank C. Pesveyc, Public Service Gas & Electric Co., Newark 1, N. J.

OKLAHOMA UTILITIES ASSOCIATION
Pres.—Harry W. Pitzer, Public Service Company of Oklahoma, Chickasha, Okla.
Sec.—Kate A. Niblack, 2415 Oklahoma Biltmore Hotel, Oklahoma City, Okla.

PACIFIC COAST GAS ASSOCIATION
Pres.—E. D. Sherwin, San Diego Gas & Electric Co., San Diego, Calif.
Man. Dir.—Clifford Johnstone, 2 Pine St., San Francisco 11, Calif.

PENNSYLVANIA GAS ASSOCIATION
Pres.—Carl I. Carlson, Scranton-Spring Brook Water Service Co., Williamsport, Pa.
Sec.—R. W. Uhler, Harrisburg Gas Div., United Gas Improvement Co., Harrisburg, Pa.

PENNSYLVANIA NATURAL GAS MEN'S ASSOCIATION
Pres.—F. N. Wolf, Equitable Gas Co., Pittsburgh, Pa.
Manager—George Doying, 2619 Grant Bldg., Pittsburgh 19, Pa.

SOUTHEASTERN GAS ASSOCIATION
Pres.—E. M. Hawkins, Water, Gas and Electric Dept., Danville, Va.
Sec.-Tr.—Edward W. Ruggles, North Carolina State College, Raleigh, N. C.

SOUTHERN GAS ASSOCIATION
Pres.—J. H. Collins, Sr., New Orleans Public Service, Inc., New Orleans 9, La.
Man. Dir.—Robert R. Suttle, 1932 Life of America Building, Dallas 1, Texas.

WISCONSIN UTILITIES ASSOCIATION
Pres.—Carl J. Forsberg, Wisconsin Power & Light Co., Madison 1, Wis.
Exec.-Sec.—A. F. Herwig, 135 West Wells St., Milwaukee 3, Wis.

American Gas Association

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